The following are work surface performance requirements which the specifier may wish to insert into Part 1 of the casework specifications.

**1. WORK SURFACE PERFORMANCE REQUIREMENTS**

A. Test procedure: Apply five drops of each reagent to surface and cover with 25mm watch glass, convex side down; test volatiles using one ounce bottle stuffed with saturated cotton. After 24 hour exposure flush surface, clean, rinse and wipe dry.

B. Evaluation ratings: Change in surface finish and function shall be described by the following ratings:

1. No Effect: No detectable change in surface material.

2. Excellent: Slight detectable change in color or gloss, but no change to the function or life of the work surface material.

3. Good: Clearly discernible change in color or gloss, but no significant impairment of work surface function or life.

4. Fair: Objectionable change in appearance due to surface discoloration or etch, possibly resulting in deterioration of function over an extended period.

5. Poor: Pitting, cratering or permanently etching of work surface material; obvious and significant deterioration.

C. Test Results - Epoxy Resin Work Surface (Black):

CHEMICAL - ACIDS RATING

1. Hydrochloric Acid 20% No Effect

2. Hydrochloric Acid 37% No Effect

3. Nitric Acid 20% Excellent

4. Nitric Acid 70% Good

5. Sulfuric Acid 25% Poor

6. Sulfuric Acid 85% Poor

7. Sulfuric Acid 96% Poor

8. Phosphoric Acid 85% No Effect

9. Perchloric Acid 60% No Effect

10. Aqua Regia -- No Effect

11. Chromic Acid 60% Good

12. Acetic Acid 98% No Effect

13. Formic Acid 90% No Effect

14. Boric Acid Sat. No Effect

15. Citric Acid Sat. No Effect

16. Oxalic Acid Sat. No Effect

17. Hydrobromic Acid 48% No Effect

18. Hydroflouric Acid 48% Good

19. Vinegar -- No Effect

CHEMICAL - BASES

20. Ammonium Hydroxide 28% No Effect

21. Sodium Hydroxide 10% No Effect

22. Sodium Hydroxide 40% No Effect

23. Sodium Hydroxide Flake No Effect

24. Potassium Hydroxide 10% No Effect

CHEMICAL - SALTS

25. Zinc Chloride Sat. No Effect

26. Calcium Hypochlorite Sat. No Effect

27. Clorox Bleach -- No Effect

28. Silver Nitrate 10% No Effect

29. Sodium Sulfide Sat. No Effect

30. Sodium Chloride Sat. No Effect

31. Iodine, Tincture -- No Effect

32. Hydrogen Peroxide -- No Effect

33. Phenol 80% No Effect

34. Cresol -- No Effect

35. Formaldehyde 40% No Effect

36. Mineral Oil 100% No Effect

37. Glycerin 100% No Effect

CHEMICAL - SOLVENTS

38. Methyl Alcohol 100% No Effect

39. Ethyl Alcohol 100% No Effect

40. Buty Alcohol 100% No Effect

41. Naphtha 100% No Effect

42. Turpentine 100% No Effect

43. Kerosine 100% No Effect

44. Heptane 100% No Effect

45. Gasoline 100% No Effect

46. Benzene 100% No Effect

47. Toluene 100% No Effect

48. Xylene 100% No Effect

49. Acetone 100% No Effect

50. Methyl Ethyl Ketone 100% No Effect

51. Methyl Isobutyl Ketone 100% No Effect

52. Ethyl Acetate 100% No Effect

53. Ethyl Ether 100% No Effect

54. Chloroform 100% No Effect

55. Methyl Chloride 100% No Effect

56. Trichlorethylene 100% No Effect

57. Carbon Tetrachloride 100% Excellent

58. Monochloro Benzene 100% No Effect

59. Dioxane 100% No Effect

60. Furfural -- No Effect

CHEMICAL - DYES

61. Congo Red 1% No Effect

62. Eosin Y 0.5% No Effect

63. Gentian Violet 1% No Effect

64. Indigo Carmen 0.5% No Effect

65. Methyl Green 0.5% No Effect

66. Wrights Blood Stain 0.35% No Effect

*Insert the following provisions in the designated location in Part 2 of the casework specification section.*

**2. EPOXY RESIN WORK SURFACE**

A. Material: Chemical and abrasion resistant, durable top of one inch thick cast material of epoxy resins and inert products, cast flat, with a uniform non-glare black matte finish.

*Edit the following to meet project requirements. Maximum epoxy resin backsplash height is 4".*

B. Backsplash curb: Same material as top, [4] [ ]" up to 6" high, [integral with top, with 5/8" coved juncture to top surface] [butt jointed and cemented to top]. Provide [where indicated on drawings] [where tops abut wall surfaces] [and at reagent ledges]. Include end curb where top abuts end wall.

C. Reagent ledges: Same material as top. Provide 6" high x 7-1/2" wide single faced units and 6" high x 9" wide double faced units [as shown on drawings] [as required]. Ledge face shall permit installation of service fixtures and top shall be removable for access to service utilities.

END OF APPENDIX A.1