Standard Testing Sequence for Removing Unknown Stains from Concrete

Introduction

These guidelines outline a testing sequence of trial and error techniques that may be used to determine the most effective method of removing unknown stains from concrete.

It is important to identify the cause of staining and the nature of the stain as part of selecting the proper removal techniques.

For removal of a specific stain type, see the appropriate specification(s) listed below:

1. Removing Asphalt Stains from Concrete
2. Removing Beverage Stains from Concrete
3. Removing Blood Stains from Concrete
4. Poulticing Bronze and Copper Stains from Concrete
5. Poulticing Candy and Confectionery Stains from Concrete
6. Poulticing Caulking Compound Stains from Concrete
7. Removing Chewing Gum from Concrete
8. Removing Coal Tar Stains from Concrete
9. Removing Creosote Stains from Concrete
10. Poulticing Curing Compound Stains from Concrete
11. Removing Surface Dirt from Concrete

12. Removing Efflorescence from Concrete

13. Removing Epoxy Adhesives and Elastomeric Joint Sealant Smears and Overruns from Concrete

14. Removing Finishing and Curing Discolorations from Concrete

15. Removing Fire, Smoke, Soot, Pitch and Wood Tar Stains from Concrete

16. Removing Paint-Based Graffiti from Concrete

17. Removing Grease Stains from Concrete

18. Removing Gypsum Plaster Stains from Concrete

19. Poulticing Ink Stains from Concrete

20. Poulticing Iodine Stains from Concrete

21. Poulticing Iron Rust Stains from Concrete.

22. Removing Mildew Stains from Concrete

23. Removing Moss Stains from Concrete

24. Poulticing Linseed, Soybean and Tung Oil Stains from Concrete

25. Poulticing Lubricating and Petroleum Oil Stains from Concrete

26. Removing Old Resilient Flooring Adhesives from Concrete

27. Removing Paint, Shellac and Varnishes from Concrete

28. Poulticing Perspiration Stains from Concrete

29. Poulticing Plywood or Joint Sealant Stains from Concrete

30. Removing Tobacco Stains from Concrete

31. Poulticing Urine Stains from Concrete

32. Removing Wood Stains from Concrete

**Equipment and Materials**

See individual specifications (such as those listed above) for specific solvents, bleaches and acids that are recommended for removal of a particular type of stain from concrete.

For stain removal activities, also have available:

1. Clean, potable water.

2. Additional accessible source of water, soap and towels for washing and rinsing in case of emergencies associated with the use of chemicals.
3. Nylon bristle brushes (metallic brushes should not be used).

**Testing Sequence**

Always start with the mildest method of cleaning and proceed to stronger methods. Conduct test treatments on patches in inconspicuous areas until a satisfactory surface is restored. Use materials in the following sequence:

1. Water with soft brushes.
2. Water with mild soap.
3. Water with stronger soap.
4. Water with stronger soap plus ammonia.
5. Water with stronger soap plus vinegar.

Only proceed to stronger chemical cleaners after the above methods have been tested. Select solvents or bleaches based on their efficacy in removing the substance believed to be the cause of the stain. If the nature of the stain is completely unknown, begin testing chemical cleaners on inconspicuous areas of stained concrete.

Test stain removers in the following sequence, until an effective method is determined. Do not proceed to the next chemical cleaner until the efficacy of the previous one has been determined.

1. Organic solvents.
2. Oxidizing bleaches, like those based on peroxides or hypochlorites. Avoid using any colored oxidizing agent like potassium permanganate which might impart additional color to the stain.
3. Reducing bleaches, some of which are used in an acidic medium.
4. Acids and other acidic materials.