

## **Air Filtration Devices and Category 1 Water Intrusions**

### **Statement of Interpretation**

Since the release of the 4th Edition of the ANSI/IICRC S500 Standard for Professional Water Damage Restoration, a frequent question received by the S500 Consensus Body relates to the use of air filtration devices (AFDs) in different categories of water intrusions.

The language pertaining to this topic is found within the IICRC S500 Reference Guide. It is in Chapter 13 *Structural Restoration*; section *Drying and Completion of the Restoration Process (Category 1 and Post Remediation Category 2 and 3)*; subsection *Controlling Airflow*; final paragraph quoted here for reference:

*“Airmoving devices inherently tend to aerosolize soils and particulates present in the environment. As water evaporates from surfaces and materials such as carpet, more particles often become aerosolized, creating possible health, safety, comfort and cleanliness issues. Restorers should perform a preliminary cleaning of materials and surfaces (e.g., carpet, hard surface floors, exposed subfloors) to reduce the amount of soil or particulates that can become aerosolized, before activating airmoving devices. Where preliminary cleaning cannot sufficiently remove soil or particulates, or there are high-risk occupants, restorers can install one or more air filtration devices (AFDs) as a negative air machine, or to control or direct airflow.”*

The language above contains two trigger words, reserved by the document as ‘Important Definitions.’ The term ‘should’ appears in reference to preliminary cleaning of materials and surfaces before activating airmoving devices. The term ‘should’ is defined as *“the practice or procedure is a component of the accepted ‘standard of care’ to be followed, while not mandatory by regulatory requirements.”* Precleaning is therefore standard of care, and should be deployed even on projects determined to be Category 1.

The second trigger word is ‘can,’ defined as *“signifies an ability or possibility open to a user of the document, and it means that a referenced practice or procedure is possible or capable of application, but is not a component of the accepted standard of care to be followed.”* The term appears in reference to the installation of one or more air filtration devices.

When the paragraph is read in the context of the given important definitions of these trigger words, the use of air filtration devices is an option for the restorer when:

1) Precleaning has been deployed as a first measure to reduce the amount of soil or particulates that can become aerosolized, *and*

- 2) The restorer cannot sufficiently remove soil or particulates through precleaning, *or*
- 3) There are high risk occupants.

Documentation of the specific items outlined above is important to ensure materially interested parties are aware of the purpose and intended use of the device.

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