



Initial Prevention and Control Measures Recommended to Help Minimize Damages.

(Water, Sewer Back up, Mould, Asbestos, Fire etc.)



Presented By

Brad Melnichuk

&



WATER REMOVAL

INTRODUCTION

“To present recommended established, practices, procedures, protocols and information, to health care facility personnel to be utilized for Initial response to an unforeseen disruption to the continued operation of a health facility, prior to a restoration contractor arriving on scene, while maintaining “Industrial Hygiene and Infection Control standards.”

What is Industrial Hygiene ?

The science and art of anticipating, recognizing, preventing and controlling environmental factors in the workplace that could lead to sickness, impaired health, and well being.

How does this apply to Maintenance, Repairs, Restoration?

- Airborne Dust and Particulate ... NOT STERILE (Asbestos)
- Cutting, grinding, materials handling, tracking
- Vibration
- WATER CONTAMINATION (Legionella)
- BACTERIA, FUNGI (moulds)
- Chemical vapours, allergens
- Sewage Contaminant, Fecal Coliform, Pathogens, Salmonella, Shigella, Escherichia coli (E.coli)

WHO CAN BE AFFECTED ?

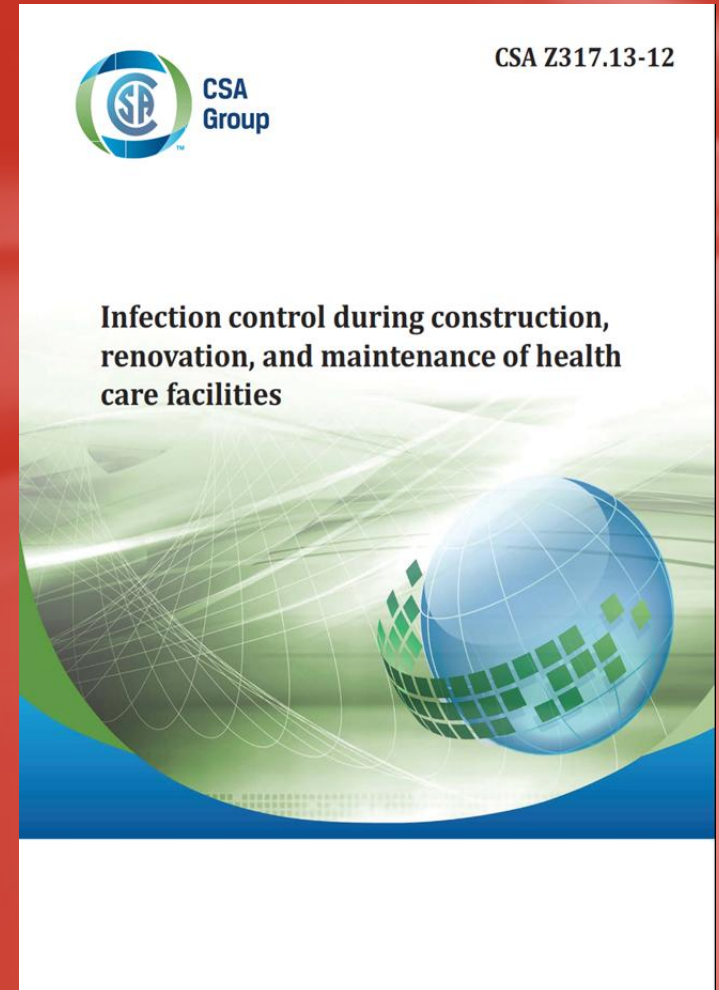
- PATIENTS - Increased susceptibility to infection
- Immunosuppression
- Drugs (cancer treatment, transplant, steroids)
- Chronic illness (HIV, hepatitis)
- Very young, Very Old
- Trauma/operation (unhealed, exposed wounds)
- Invasive procedures (dialysis, endoscopy, injections)
- Affects can be life-threatening
- Many documented fatalities linked to construction dust

Who Else ?

- STAFF (Doctors, nurses, housekeeping, food service)
- Handling sterile supplies
- Preparation and handling of food
- Those susceptible to infections, allergic responses
- ...Indoor Air Quality Issues (IAQ)
- VISITORS
- Contact with patients
- Susceptible to infections, allergic responses

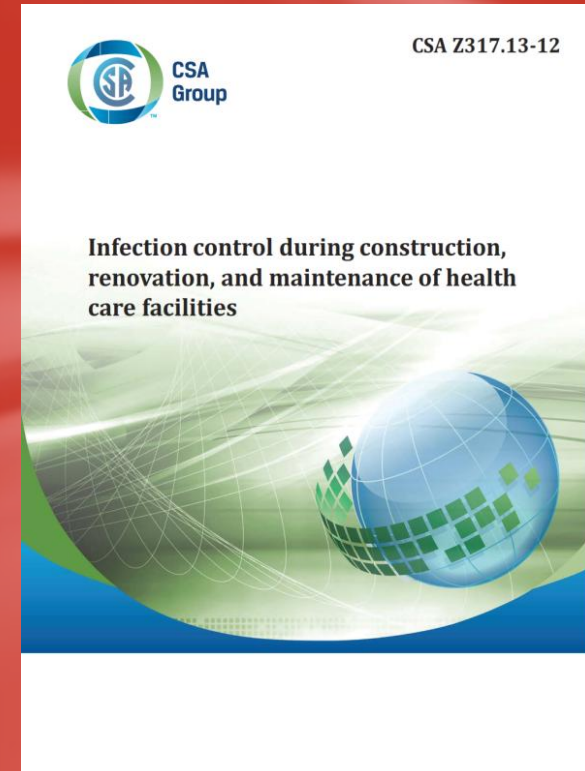
CSA Z317.13-12 Infection Control during Construction, Renovation, and Maintenance of Health Care Facilities

This Standard has been developed for use during the project specification phase of construction, renovation, and maintenance projects and as a guideline for preventing and controlling fungal and bacterial infections during the implementation of such projects.



CSA Z317.13-12 Infection Control during Construction, Renovation, and Maintenance of Health Care Facilities

- This Standard was developed in response to evidence of the serious health risks for patients, staff, and visitors from construction, renovation, and maintenance activities. Without the proper precautions, these activities can disperse dust particles contaminated with bacteria and fungi.
- The evidence led to the conclusion that early planning in construction and renovation projects must integrate infection prevention and control, engineering services, and facility design to prevent infections and minimize allergen load and other workplace hazards.



CSA Z317.13-12 Infection Control during Construction, Renovation, and Maintenance of Health Care Facilities

History

Comes from the Division of Nosocomial and Occupational Infections, Bureau of Infectious Diseases, Centre for Infectious Disease Prevention and Control, Population and Public Health Branch, Health Canada, Ottawa, Ontario, Canada.

This Standard was prepared by the Subcommittee on Infection Control during Construction, Renovation, and Maintenance of Health Care Facilities, under the jurisdiction of the Technical Committee on Health Care Facility Engineering and Physical Plant and the Strategic Steering Committee on Health Care Technology, and has been formally approved by the Technical Committee.

CSA Z317.13-12 Infection Control during Construction, Renovation, and Maintenance of Health Care Facilities

This Standard is intended to apply to the activities of:

- architects;
- engineers;
- commissioning teams;
- constructors
- infection prevention and control personnel;
- planning and project managers;
- facility managers and maintenance managers;
- environmental services staff;
- health care staff;
- occupational health hygiene professionals; and
- operations and maintenance staff involved in any aspect of construction, renovation, or maintenance of health care facilities.

CSA Z317.13-12 Infection Control during Construction, Renovation, and Maintenance of Health Care Facilities

9.5.1

In cases where bacterial contamination or mould growth has not been detected and only moisture damage has occurred, immediate action shall be taken to prevent further problems. Assessment, mitigation, material removal, **In-place Drying**, and restoration methods shall be conducted in a manner consistent with the **IICRC S500**.

9.5.2

Cellulose fibre-based and porous materials (e.g., acoustic ceiling tiles, gypsum wallboard, carpet, and fabrics) shall be assessed, and if found to be moist, they shall be dried or removed as necessary. If there is a question whether or not to remove materials, a risk assessment shall be used that takes into account the patient population and the expected use of the space. Materials that are **Supporting Mould Growth** shall be discarded and replaced.

CSA Z317.13-12 Infection Control during Construction, Renovation, and Maintenance of Health Care Facilities

Because mould can rapidly appear on cellulose and fibre-based materials, such materials **shall be replaced** if they have been wet for more than **48 hrs or have had multiple exposures to moisture.**

9.6.6

All surfaces and materials adjacent to the affected area shall be thoroughly vacuumed with a **HEPA filter equipped** vacuum cleaner and wet wiped with a mild detergent. The MDT shall assess if the application of a disinfectant, sanitizer, or sterilizer to adjacent materials is necessary.

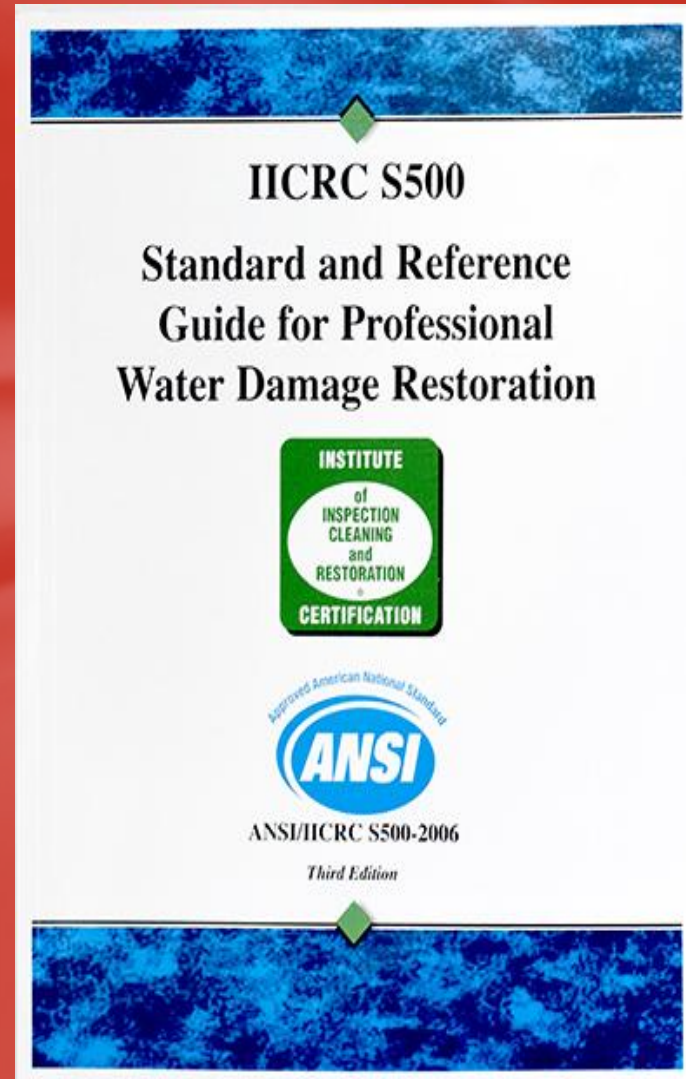


ANSI/IICRC S500-2006

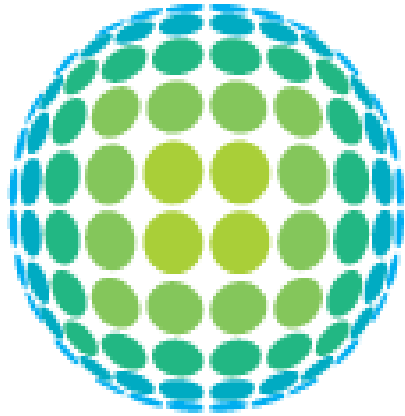
(Approved American National Standard)

The IICRC Standard for Professional Water Damage Restoration (ANSI/IICRC S500-2006) is a procedural standard. It is based on reliable restoration principles, research and practical experience.

In addition, there has been extensive consultation and information obtained from numerous sources. These sources include, but are not necessarily limited to, the scientific community, the international, national and regional trade associations serving the professional disaster restoration industry, chemical formulators and equipment manufacturers, cleaning and restoration training schools, restoration service companies, the insurance industry, allied trades persons and others with specialized experience.



Institute of Inspection Cleaning and Restoration Certification (IICRC)



IICRC

Institute of Inspection Cleaning
and Restoration Certification

The IICRC is an American National Standards Institute (**ANSI**) member and accredited standards developer. ANSI is responsible for overseeing the development of national consensus standards and verifying that the requirements for due process, consensus, and other criteria for approval have been met by the standard's developer.

The IICRC serves as an independent, nonprofit standard-setting and certification body, to set and promote high standards and ethics; and to advance communication and technical proficiency within the inspection, cleaning and restoration service industries.

Institute of Inspection Cleaning and Restoration Certification



What can you immediately do, when a flood water situation has been discovered that compromises the continued operation of your health care facility ?

Pay attention to your safety first and foremost. Contents and structure can be replaced or fixed, You can't !!

Do a Hazard Assessment. Make sure the structure is stable enough to enter. Utilize the appropriate PPE and pay attention to what you are entering. Is the atmosphere you are entering safe to breath?

Remember that disturbed drywall, insulation and flooring material may be containing Asbestos.



What can you immediately do when a flood water situation has been discovered that compromises the continued operation of your health care facility ?

Water conducts electricity!! You may have to get the water, electricity or other services shut off or redirected first in order to access the source safely. Contact the appropriate utilities companies if required.

Identify the source of the water and eliminate, reduce, or redirect it. Determine the type of source, extent of the areas affected, the severity and estimated length of time it has been occurring. “What Got Wet and How Long”?



Cleaning Agents

PRS Water Damage PreClean is a biologically based initial treatment for water damage claims, especially black water. It digests odors and soils, including those from fecal matter and urine, reducing them to water and carbon dioxide. PRS Water Damage PreClean utilizes spore strains and advanced cleaning technology specifically engineered for water damage claims. It is also designed for areas of heavy pet urine and soils from trauma.



PRS Odor Control digests odors and moderate soil loads, reducing them to water and carbon dioxide using incredibly concentrated levels of spore strains that recognize and digest the organic odors at their source. This product contains no fragrance or deodorizers, which could trigger hypersensitivities.



Water Damage PreClean and Odor Control can be applied together on initial application.

What can you immediately do when a flood water situation has been discovered that compromises the continued operation of your health care facility ?

HVAC Systems

Segregate, Blind or shut off the HVAC / Air Make-Up Units in the effected areas so as to not cross contaminate the rest of the facility.

Cover Vents, Air Returns, Ducting openings etc that may carry contaminants to other areas or into the HVAC / Air Makeup units.

Limit or restrict access so as to reduce tracking and potential cross-contamination.

Relocate patients and essential services if possible or Segregate if relocation is not an option.

Be aware that adjustments, restrictions, negative air units or other alterations can affect the maintained balancing of the HVAC systems. Adjustments to the monitoring systems may be required so as to not affect the rest of the facility's systems.

When the Situation is Discovered

In some cases the water source may not be able to be immediately stopped. When this occurs removal/relocation of contents to reduce further damages and losses, and removal and disposal of building materials that will support fungal development must occur.

Focus on irreplaceable, private documents, records and files is paramount. If important documents have been affected. Get them out of the moisture affected area and frozen as soon as possible to reduce further damage, stop the deterioration, and to stop fungal development.



Identifying the Source. Categories of Water Intrusions

Category 1

- Is water originating from a sanitary water source and does not pose substantial risk from dermal, ingestion, or inhalation exposure.

Examples of Category 1 water sources can include but are not limited to: broken water supply lines; tub or sink overflows with no contaminants; appliance malfunctions involving water-supply lines; melting ice or snow; falling rainwater; broken toilet tanks, and toilet bowls that do not contain contaminants or additives. However, once clean water leaves the exit point, it may not remain clean once it contacts other surfaces or materials.

The cleanliness of Category 1 water may deteriorate to Category 2 or 3 for many reasons, including but not limited to: contact with building materials, systems and contents; mixing with soils and other contaminants. Some factors which influence the potential organic and inorganic load in a structure include the age and history of the structure, previous water losses, general housekeeping, the type of use of the structure (e.g., nursing home, hospital, day care, warehouse, veterinary clinic), and elapsed time or elevated temperature. Odors can indicate that Category 1 water has deteriorated.

Categories of Water Intrusions

Category 2 – Category 2 water contains significant contamination and has the potential to cause discomfort or sickness if contacted or consumed by humans. Category 2 water can contain potential unsafe levels of microorganisms or nutrients for microorganisms, as well as other organic or inorganic matter (chemical or biological). Examples of Category 2 water sources can include but are not limited to: discharge from dishwashers or washing machines; overflows from washing machines; overflows from toilet bowls on the room side of the trap with some urine but no feces; seepage due to hydrostatic pressure; broken aquariums and punctured water beds.

The cleanliness of Category 2 water may deteriorate for many reasons, including but not limited to: contact with building materials, systems and contents; mixing with soils and other contaminants. Some factors which influence the potential organic and inorganic load in a structure include the age and history of the structure, previous water losses, general housekeeping, the type of use of the structure and elapsed time or elevated temperature.

Categories of Water Intrusions

Category 3

– Category 3 water is grossly contaminated and can contain pathogenic, toxigenic or other harmful agents. Examples of Category 3 water sources can include but are not limited to: sewage; toilet back-flows that originate from beyond the toilet trap regardless of visible content or color; all forms of flooding from seawater; ground surface water and rising water from rivers or streams, and other contaminated water entering or affecting the indoor environment, such as wind-driven rain from hurricanes, tropical storms, or other weather-related events. Such water sources may carry silt, organic matter, pesticides, heavy materials, regulated materials, or toxic organic substances.

Categories of Water Intrusions

Special Situations

– If a regulated or hazardous material is part of a water damage restoration project, then a specialized expert may be necessary to assist in damage assessment, and government regulations apply. Regulated materials posing potential or recognized health risks may include, but are not limited to: arsenic, mercury, lead, asbestos, polychlorinated biphenyls (PCBs), pesticides, fuels, solvents, caustic chemicals, radiological residues.

For situations involving visible or suspected mold, refer to IICRC *S520 Standard and Reference Guide for Professional Mold Remediation*.

Extraction: Remove the Easy Water First

The most effective and expedient way to reduce further damage, the possibility of fungal growth, maintain infection control, and speed up the drying process, is to remove as much water in a liquid state as quickly as possible. (The longer it sits, the more it soaks in and the further it spreads).

Extraction and evaporation are the only ways water can be removed from a wet structure.

During extraction, liquid water can be more easily vacuumed, mopped, squeegeed, soaked or otherwise removed. This takes some effort but is not as complicated or time consuming as evaporation.

Dispose of water, making sure to abide by local laws and regulations. Waste water can be disposed of in a sanitary drain (not a storm drain), unless it contains hazardous materials, than special arrangements must be made for disposal.



Spill Kits

- Universal or General Purpose Kits: Made with gray absorbents to clean up both water based fluids and hydrocarbons. These are usually g-ray in color.
- Oil Only Kits: Made with white absorbents that repel water and float on water. Used to clean up hydrocarbons only (motor oil, jet fuel, diesel, gasoline, hydraulic oil, etc).
- Hazmat Kits: Made with yellow absorbents to clean up aggressive fluids such as acids and solvents. Hazmat kits will absorb hydrocarbons as well as water based fluids.



Remove or relocate furniture and contents in order to gain further access to standing water and affected structural areas and wet carpets and flooring. Further damage to content is reduced and drying time is improved by relocating or moving them to a non-affected area. Clean/Disinfect contents before relocation to avoid cross-contamination.

Suck up as much standing water as possible from carpets. If deep extraction is not possible, the carpet underlay must be removed to reduce drying times. Otherwise excess water remains trapped between the underlay and the floor.

Evaluate if cabinetry is wet or damaged and determine actions. Drill holes in toe kicks to facilitate drying or consider removal or dismantling.



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**Mould under Tile,
Carpet and Linoleum
due to trapped
moisture**



Helping the Drying

Remove baseboards, label (for tracking, replacement, reinstallation), and set aside to facilitate drying.

If the water source has been determined to be Category 1 (fresh water), and it has been less than 48 hours, in-place drying should be attempted before removal of the wet material.

If available the installation of “Inject-A-Dry” style equipment will speed up drying and reduce the chance of having to remove and replace building materials.



Helping the Drying

If sewer, fungal growth or asbestos are not a factor, place blowers under and on the carpet to increase drying. Direct blowers on structural surfaces to expedite drying.

When possible Utilize “Inject-A-Dry” applications to try and dry affected components before removal or the 48 hour time frame is expired.

If there is the possibility of sewer, mould or asbestos, blowers, **No fans or any aggressive type of air movement** to be utilized because of the possibility of spreading contaminant, spores or fibres.

Only the installation of Dehumidification Equipment is allowed until cleaning and disinfecting has been completed.



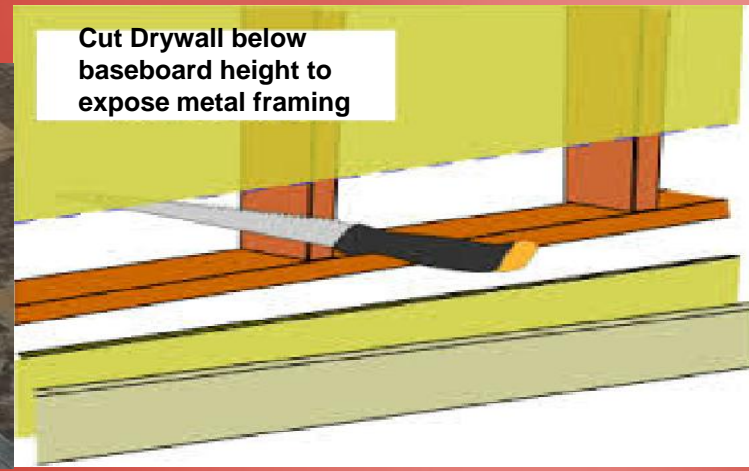
Helping the Drying

Cut drywall 2 – 3 inches from floor or below level of base or cove base material to expose metal stud channel on floor to suck out standing water to clean, disinfect and dry.

Cut-out can be replaced, fire-taped and a wider baseboard or cove base can be installed so as eliminate repainting and reduce costs.

This method can also be utilized to increase drying efficiency on a standard wood stud wall by directing fans/blowers into the wall cavity after removing wet insulation .

If it is Tile or Vinyl Wrapped walls try and dry in place. Do not remove.



Cutting Drywall

When disposing of cut drywall or building material always double-bag to eliminate chance of garbage bags tearing and releasing contained debris.

Bag drywall as you cut to reduce debris pile-up, dust, tracking and breakdown from foot traffic, and maintaining housekeeping.

Double bag sharp material, metal components, anything sharp in clear bags or boxes.



ASBESTOS

A legal legislated
requirement of
Alberta's
Occupational Health
and Safety
Legislation

Alberta Asbestos Abatement Manual

Prepared by
Human Services
October 2012

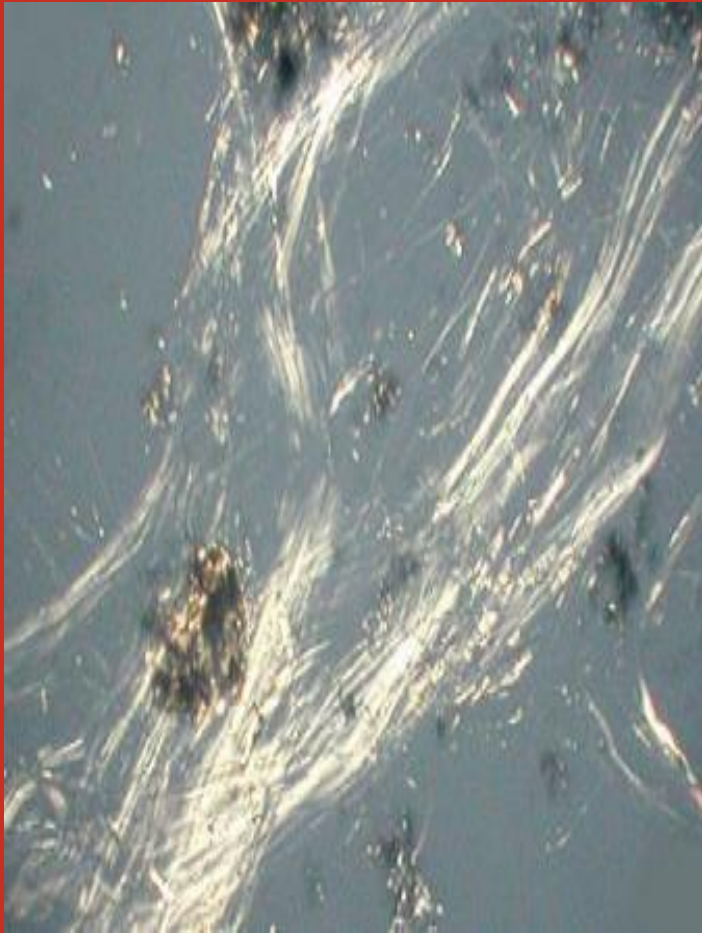


Asbestos

- Asbestos fibres, unlike man-made fibres such as fiberglass, can be split into thinner and thinner fibres parallel to their length. At their finest, the fibres can hardly be seen by the best optical microscope. The average diameter of an airborne asbestos fibre ranges from 0.11 to 0.24 micrometres, depending on the type of asbestos.
- By comparison, a human hair is approximately 75 micrometres in diameter (more than 300 times thicker) and glass fibre ranges between 3 to 15 micrometres in diameter.



ASBESTOS



- Seen under a microscope, chrysotile asbestos has a very curly nature, similar to a wavy string or thread. Amosite and crocidolite forms of asbestos are very straight and rod-like, reflecting their solid structure.
- These fine fibres tend to settle very slowly in air. The aerodynamics of settling are determined by the mass, form (particularly the diameter) and orientation of the fibre.
- If any air turbulence is present, the fibre may not settle out or can easily re-enter the air stream after it has settled.

ASBESTOS & FRIABILITY

In laboratory tests, a single Asbestos fibre is dropped from an 8 foot height in a room with no windows and doors so there is “Zero Air Movement”. It takes that fibre up to 8 hours to settle to the floor.

This leads to the “**Potential Hazard**” of Asbestos. This refers to its “**Friability**”.

A “**Very Friable**” material is something that easily crumbles with hand pressure; a less friable material cannot be crushed with hand pressure. The **More Friable** the material, the more likely it is to release fibres into the air.



Asbestos

Installed prior to
1985

{
Surfacing materials
Thermal System Insulation
Flooring

Any Presence of Vermiculite Insulation
(should be considered containing until tested to prove otherwise)



“PACM” Presumed Asbestos Containing Material

“ACM” Asbestos Containing Material

All Material Must be handled as “ACM”
unless proven otherwise by testing

Asbestos Containing Material

It is a “Myth” that there is Asbestos in drywall. Drywall (gypsum) itself contains **No Asbestos** what so ever and never did.

It can however be present in the Drywall Joint Compound, Patching compound, ceiling or wall texture, flooring material, leveling compound and “Other” building materials.....

Asbestos-Containing Materials

- Elevator Equipment Panels
- Elevator Brake Shoes
- HVAC Duct Insulation
- Boiler Insulation
- Breaching Insulation
- Ductwork Flexible Fabric Connections
- Cooling Towers
- Pipe Insulation (corrugated air-cell, block, etc.)
- Heating and Electrical Ducts
- Electrical Panel Partitions
- Electrical Cloth
- Electric Wiring Insulation
- Chalkboards
- Roofing Shingles
- Roofing Felt
- Base Flashing
- Thermal Paper Products
- Fire Doors
- Caulking/Putties
- Adhesives
- Wallboard
- Joint Compounds
- Vinyl Wall Coverings
- Spackling Compounds

Asbestos-Containing Materials

- Cement Pipes
- Cement Wallboard
- Cement Siding
- Asphalt Floor Tile
- Vinyl Floor Tile
- Vinyl Sheet Flooring
- Flooring Backing
- Construction Mastics (floor tile, carpet, ceiling tile, etc.)
- Acoustical Plaster
- Decorative Plaster
- Textured Paints/Coatings
- Ceiling Tiles and Lay-in Panels
- Spray-Applied Insulation
- Blown-in Insulation
- Fireproofing Materials
- Taping Compounds (thermal)
- Packing Materials (for wall/floor penetrations)
- High Temperature Gaskets
- Laboratory Hoods/Table Tops
- Laboratory Gloves
- Fire Blankets
- Fire Curtains

How do asbestos fibers get in the air?

Activities and situations that can result in workers or inhabitants inhaling asbestos fibers:



Water damage, deterioration

- Mechanical action on ACM (cutting, sawing, grinding, sanding, drilling, buffing)
- Disturbing/breaking ceiling tiles
- Removing/replacing insulation
- Disturbing sprayed-on asbestos
- Damaged/deteriorated ACM
- Asbestos abatement project
- Un-tested construction projects on older buildings

Respiratory Hazards, Fire Soot

- The human bronchial system is designed to filter out toxins in the 10+micron range, allowing them to be flushed out through the digestive system. Soot particles from a fire are 0.06 to 0.1 micrometer (mm) in diameter. These particles are small enough to make it through your respiratory system and eventually enter into your blood stream.
- Soot's contain POLYCYCLIC AROMATIC HYDROCARBONS (PAHs). The PAHs in soot are known MUTAGENS and are classified as a "Known Human Carcinogen" by the International Agency for Research on Cancer (IARC).
- Soot particles are the source of emission of volatile compounds. They off-gas for a period of time following the cessation of burning .These substances include aldehydes such as formaldehyde, acetaldehyde and acrolein.
- Electrical switches, thermostats and fluorescent lights, tv and computer screens can contain mercury, albeit in small quantities. Destruction of these devices in a fire can lead to release of the mercury into the debris.



Respiratory Hazards, Fire Soot

Combustion of materials generate asphyxiates, irritants, and airborne carcinogenic species that could be potentially debilitating. The combination and concentrations of gases produced depended on the base chemistry of the material:

- Burnt materials form water, carbon dioxide and carbon monoxide.
- Styrene based materials form Benzene, Phenols, and Styrene.
- Vinyl compounds formed Acid Gases (HCl and HCN) and Benzene.
- Wood based products formed Formaldehyde, Formic Acid, HCN, and Phenols.
- Roofing materials form Sulfur gas compounds such as Sulfur dioxide and Hydrogen Sulfide.

Containments, Barriers, Controlling Cross-Contamination



Containments, Barriers, Controlling Cross-Contamination



7.2.2.2 Methods to minimize dust generation and migration

f) placing a walk-off mat outside the entrance to the construction area to trap dust from the equipment and footwear of personnel leaving the area, and selecting and maintaining the mat as specified in Clause 6.6.1.9;

6.6.1.9

Walk-off mats shall be of sufficient size to ensure that constructors have to place both feet on the mat at least once on exiting the construction area. The material used for the walk-off shall be appropriate to the site, the expected traffic level, and the type of soil that is likely to be tracked. They shall be maintained as follows:



Fans / Air Movers / Blowers





How far does the Moisture go ?

Find out how far the moisture extends.

There are both “Evasive and Non-Evasive meters available for testing for moisture.





Thermal Imaging Cameras

Infrared thermography, thermal imaging, are examples of infrared imaging science. Thermal imaging cameras detect radiation in the infrared range of the electromagnetic spectrum and produce images of radiation, called **thermo grams**.

The amount of radiation emitted by an object increases with temperature; therefore, thermography allows one to see variations in temperature.



 **FLIR**



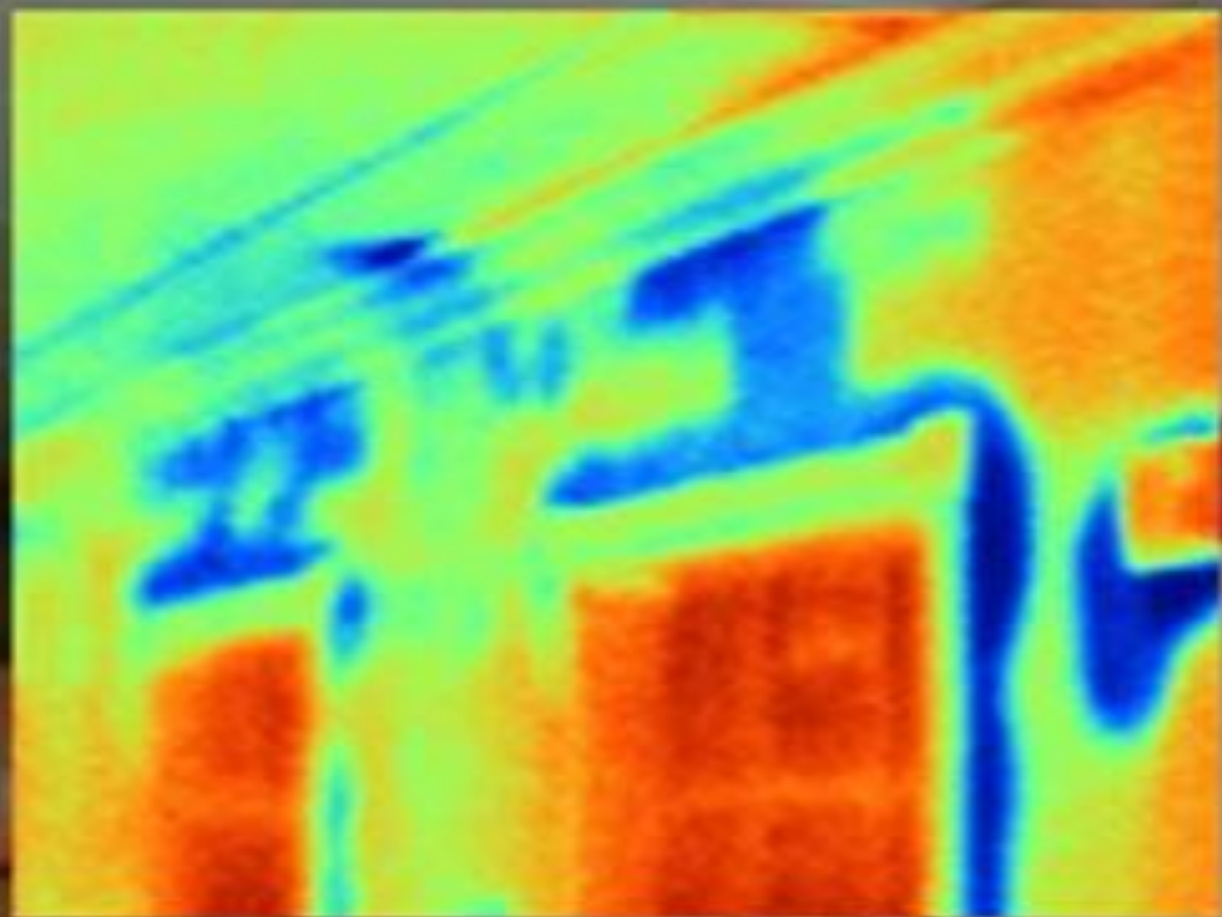
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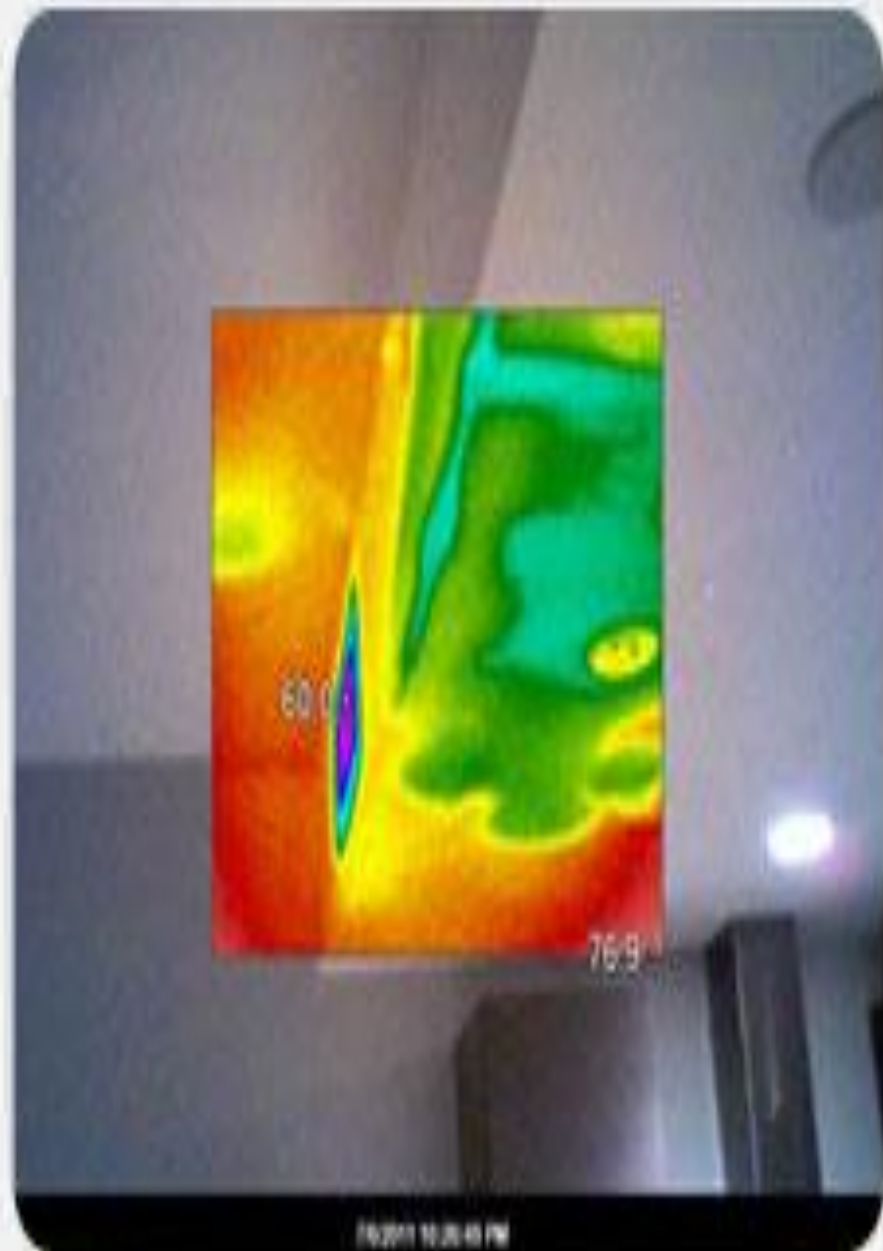


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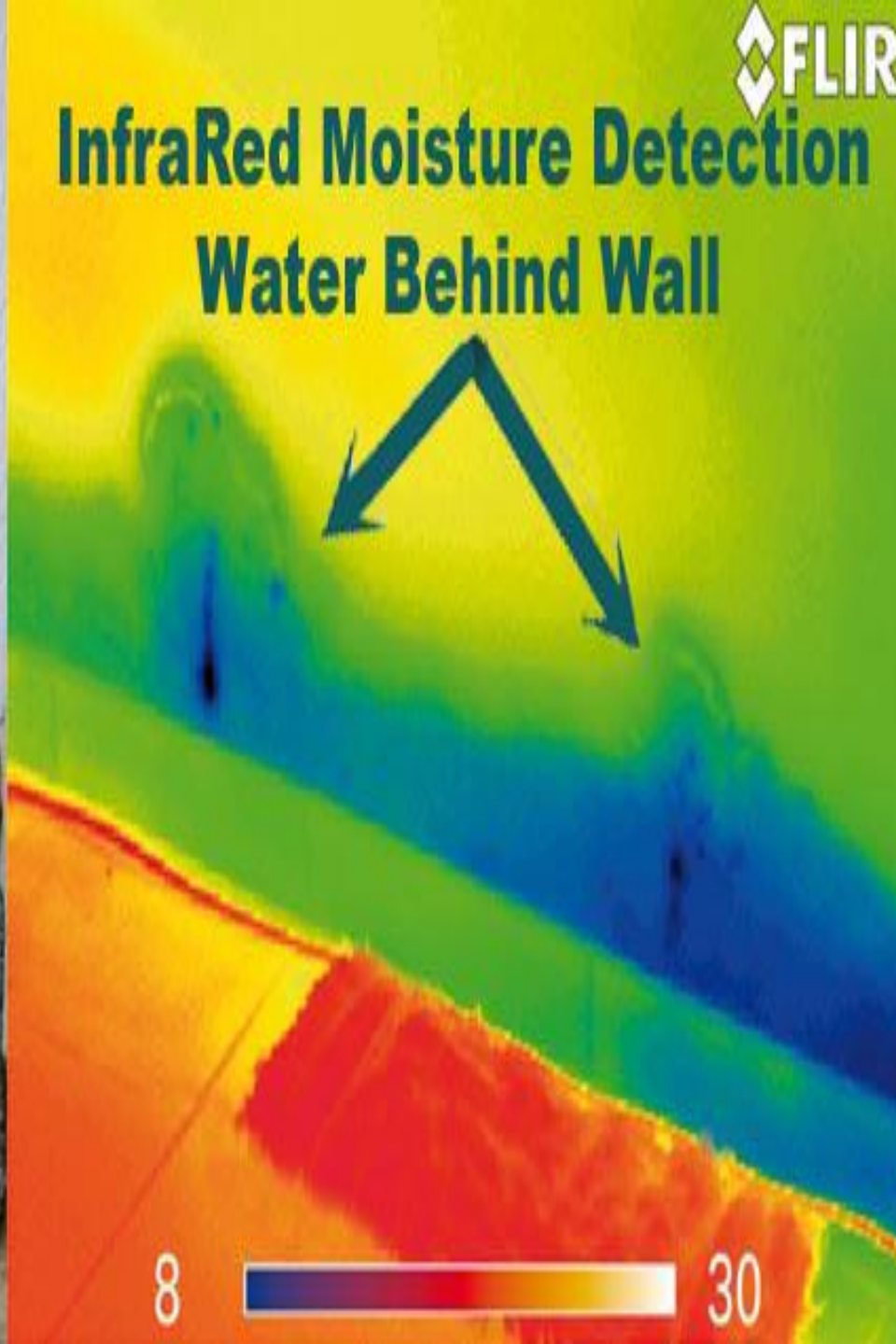
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InfraRed Moisture Detection

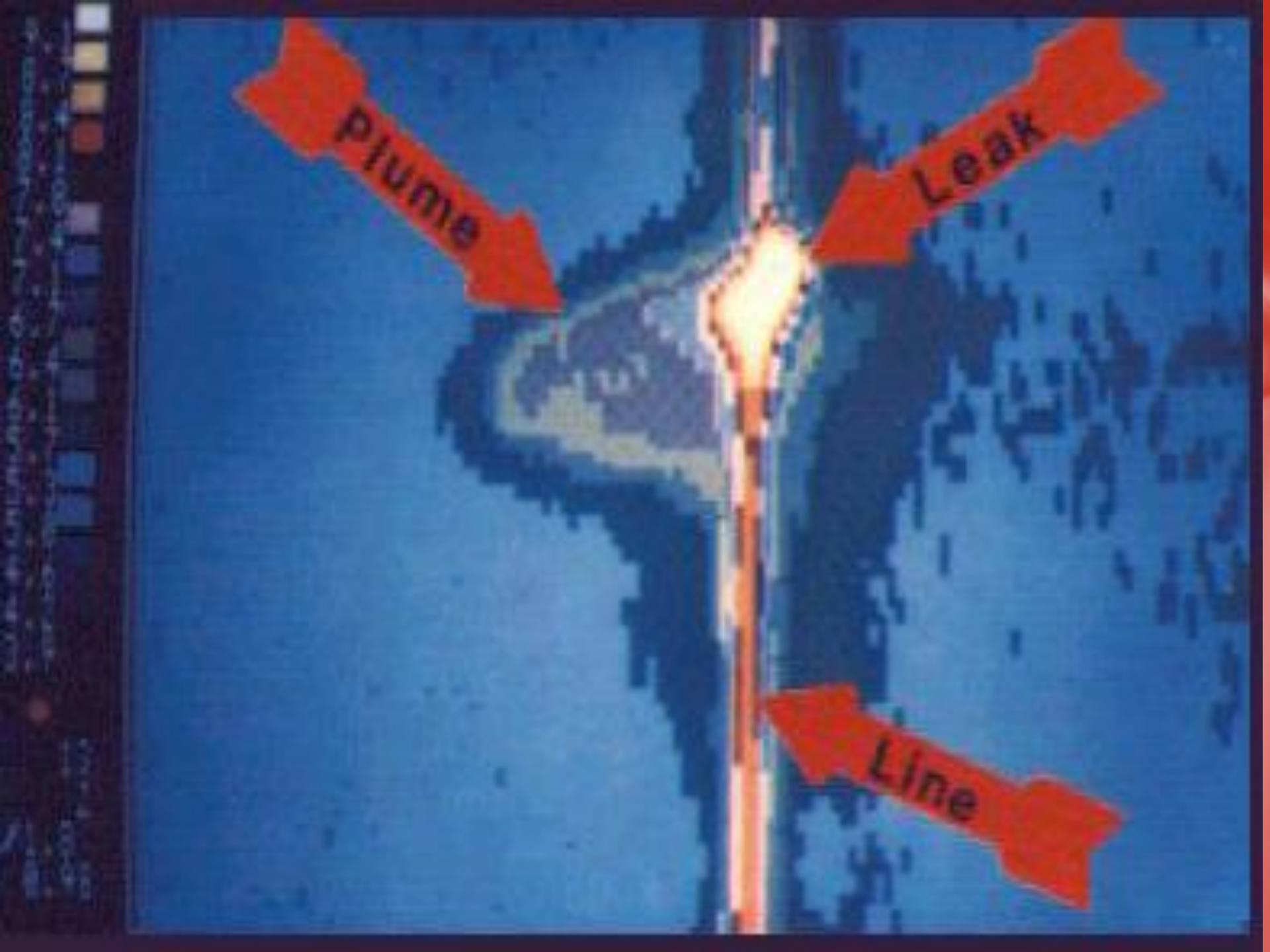
Water Behind Wall



Plume

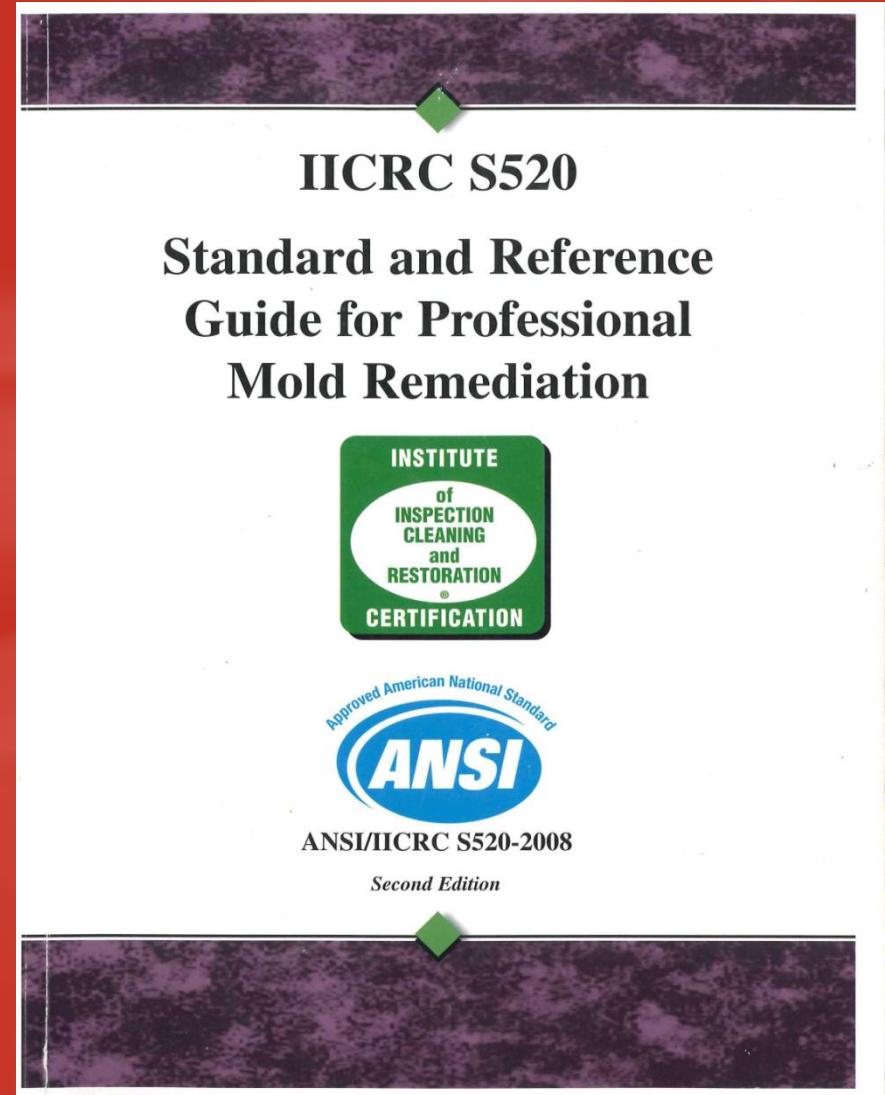
Leak

Line



IICRC S520 Standard and Reference Guide for Professional Mold Remediation

The S520 is written for use by those involved in the mold remediation industry, and is the result of collaboration among microbiologists and other scientists, public health professionals, industrial hygienists, remediation contractors, restoration service companies, cleaning and restoration training schools, trade associations that service the professional restoration industry, allied trade-persons, and others with related professional and practical experience.



Secondary Fungal Contamination (Mould)

Construction-related infections caused by *Aspergillus*, *Legionella*, and other agents have been reported for several health care facilities.

The mortality rate in health care facilities for,

- Aspergillosis (i.e., an *aspergillus* infection from exposure to the *Aspergillus* group of moulds) is high (65 to 100% from infection due to *Aspergillus* exposure), and,
- Legionnaires' Disease (*pneumonia caused by Legionella*) acquired (and between 24 and 80% from *Legionella* related pneumonia), even when these infections are recognized and treated.

Secondary Fungal Contamination (Mould)

- Immunosuppressed patients, the elderly, and the very young are at greatest risk of acquiring a fungal or bacterial infection. The immunosuppressed group includes patients who have undergone bone marrow or solid organ transplants, patients receiving dialysis, patients taking immunosuppressive medications (including steroids}, and oncology patients receiving chemotherapy.
- Appropriate mitigation measures focusing on patient safety are necessary before and throughout construction, renovation, and maintenance.

Moulds

In some cases, indoor mould growth may not be obvious, but can happen within 24-48 hours.

It is possible that mould may be growing on hidden surfaces, such as the backside of dry wall, wallpaper, or paneling, the top of ceiling tiles, the underside of carpets and pads, etc.



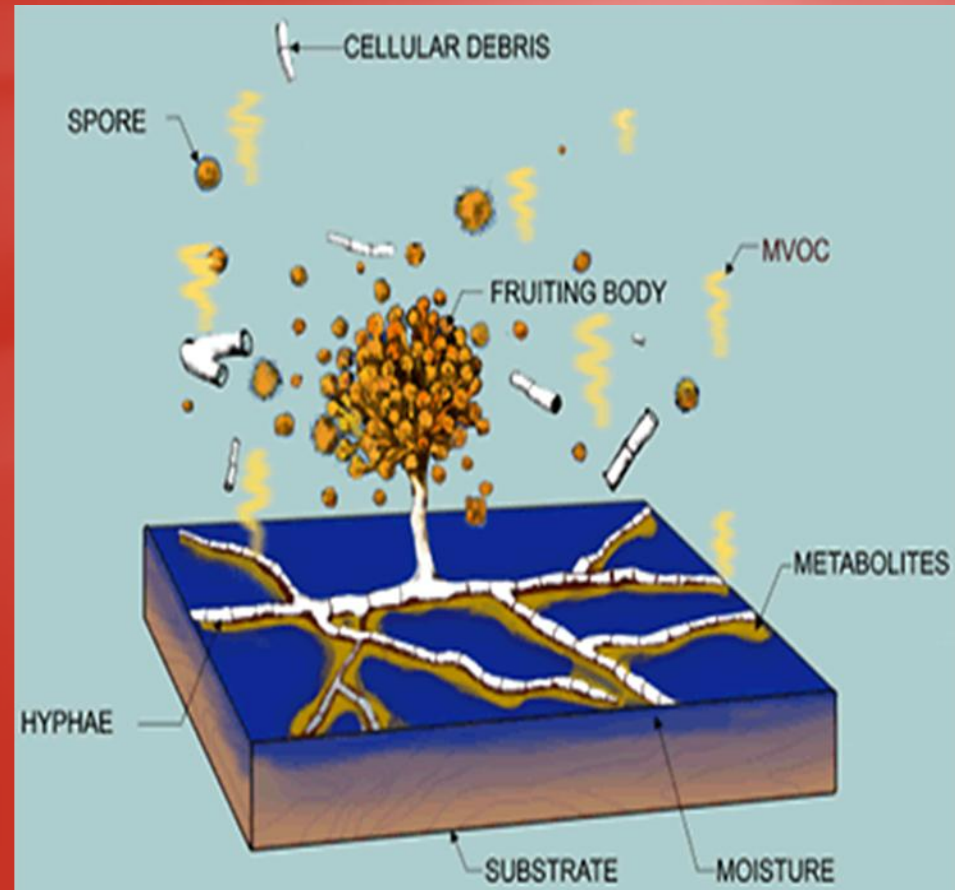
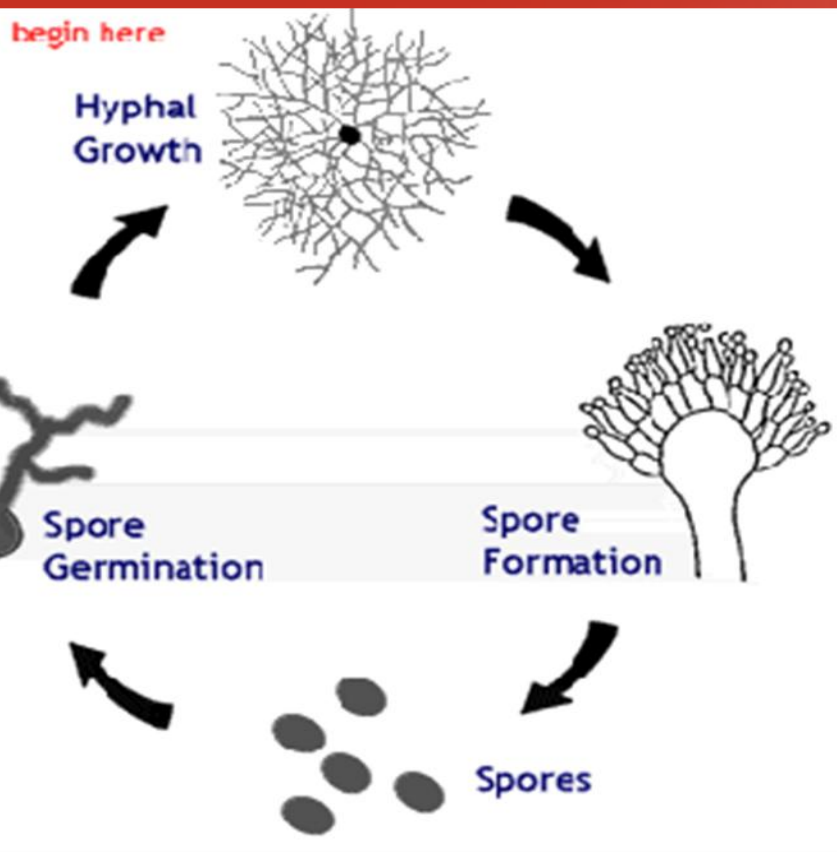
Mould

- Mould spores are tiny bacteria less than 4 microns in size - so small that as many as 250,000 spores can fit on a pin head.
- This small size has numerous impacts on dealing with mould. They are so tiny that they infiltrate our environments with air and they are essentially invisible so cleaning them up without special equipment and procedures is next to impossible.
- One mould spore can develop into 12 million in twelve hours!



Mould

Mould is feeding where ever it is visible, and what you can see with the naked eye are millions and millions of them clumped together. What you can't see are the "roots" The organism itself.



Mycotoxins

A secondary metabolite, called Mycotoxins, are produced to give fungi a competitive edge against other microorganisms, including other moulds and fungi. There are over 200 recognized mycotoxins, however, the study of mycotoxins and their health effects on humans is in its infancy and many more are still waiting to be discovered.

Many Mycotoxins are harmful to humans and animals when inhaled, ingested or brought into contact with human skin.

Mycotoxins are nearly all cytotoxic, disrupting various cellular structures such as membranes, and interfering with vital cellular processes such as protein, RNA and DNA synthesis.

Mycotoxins can cause a variety of short term as well as long-term health effects, ranging from immediate toxic response to potential long-term carcinogenic and teratogenic effects. Symptoms due to exposure to mycotoxins include dermatitis, cold and flu symptoms, sore throat, headache, fatigue, diarrhea, and impaired or altered immune function, which may lead to opportunistic infection.

Communication of Hazards, Signage

Warning Signs Posted
For all regulated areas
Visible before entering
Containment or Work Area.



Warning Labels attached
to all products and their
containers



Caution
DO NOT ENTER
*Possible Health
Hazard*
Remediation Work
In Process
For Further
Information Please
Call
Belfor at 780-455-5566

Available Recommended Courses

- IICRC - Applied Microbial Remediation Technician
- CSA - Effective Implementation and Practical Applications of Infection Control During Construction, Renovation and Maintenance of Health Care Facilities
- CSA - Fundamentals of Infection Control During Construction, Renovation and Maintenance of Healthcare Facilities
- IICRC - Fire and Smoke Restoration Technician
- Alberta Occupational Health and Safety for the Asbestos Worker
- IICRC - Odor Control Technician
- IICRC - Water Damage Restoration Technician

Thank You