NIOSH

Dampness and Mold Assessment Tool for Schools

Instructions Packet

The NIOSH Dampness and Mold Assessment Tool

There are two components to the tool:

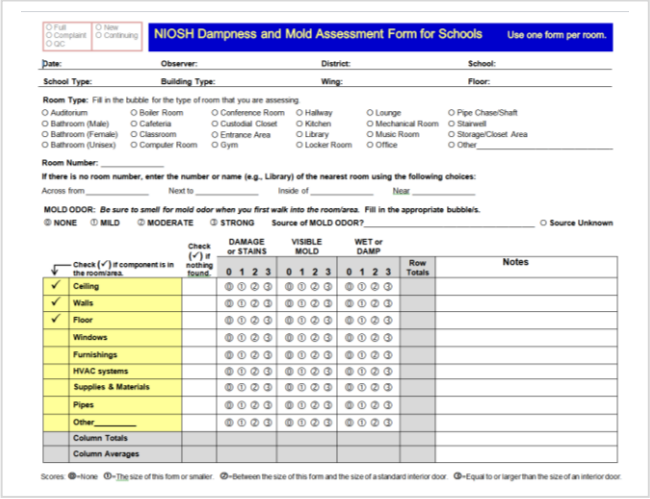
1

An assessment form (hard copy) that is used to evaluate signs of dampness, water damage, mold growth, and musty odors in rooms and areas throughout a building.

2

A data entry application programmed in Visual Basic® with Microsoft Access® being the primary storage database.

The application allows the user to enter data from the hard copy assessment form into the database or to collect data directly onto desktops, laptops and tablets running Microsoft Windows® XP or greater. It also provides basic reports.



NIOSH Dampness and Mold Assessment Form for Schools — Use one form per room.

Date: Observer: District: School:

School Type: Building Type: Wing: Floor:

Room Type: Fill in the bubble for the type of room that you are assessing.

○ Auditorium	○ Boiler Room	○ Conference Room	○ Hallway	○ Lounge	○ Pipe Chase/Shaft
○ Bathroom (Male)	○ Cafeteria	○ Custodial Closet	○ Kitchen	○ Mechanical Room	○ Stairwell
○ Bathroom (Female)	○ Classroom	○ Entrance Area	○ Library	○ Music Room	○ Storage/Closet Area
○ Bathroom (Unisex)	○ Computer Room	○ Gym	○ Locker Room	○ Office	○ Other_____

Room Number: _____

If there is no room number, enter the number or name (e.g., Library) of the nearest room using the following choices:

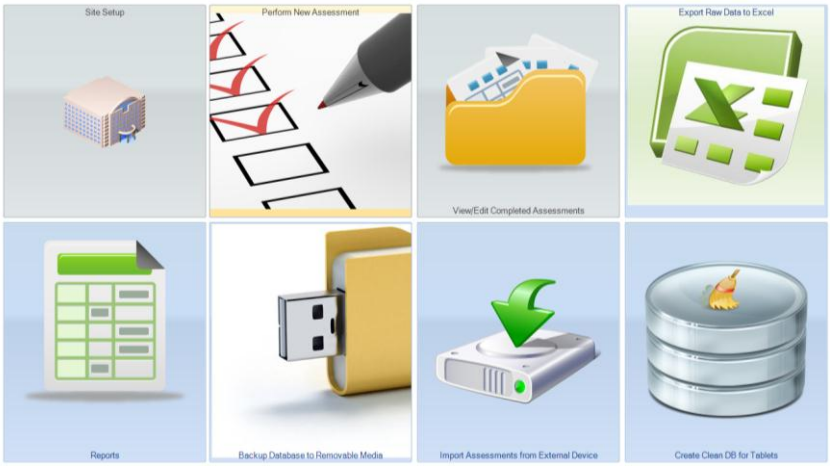
Across from_____ Next to_____ Inside of_____ Near_____

MOLD ODOR: *Be sure to smell for mold odor when you first walk into the room/area.* Fill in the appropriate bubble/s.

⓪ NONE ① MILD ② MODERATE ③ STRONG Source of MOLD ODOR?_____ ○ Source Unknown

Check (✓) if component is in the room/area.		Check (✓) if nothing found.	DAMAGE or STAINS 0 1 2 3	VISIBLE MOLD 0 1 2 3	WET or DAMP 0 1 2 3	Row Totals	Notes
✓	Ceiling		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
✓	Walls		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
✓	Floor		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
	Windows		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
	Furnishings		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
	HVAC systems		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
	Supplies & Materials		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
	Pipes		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
	Other_____		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
	Column Totals						
	Column Averages						

Scores: ⓪=None ①=The size of this form or smaller. ②=Between the size of this form and the size of a standard interior door. ③=Equal to or larger than the size of an interior door.



The purpose of this tool is to:

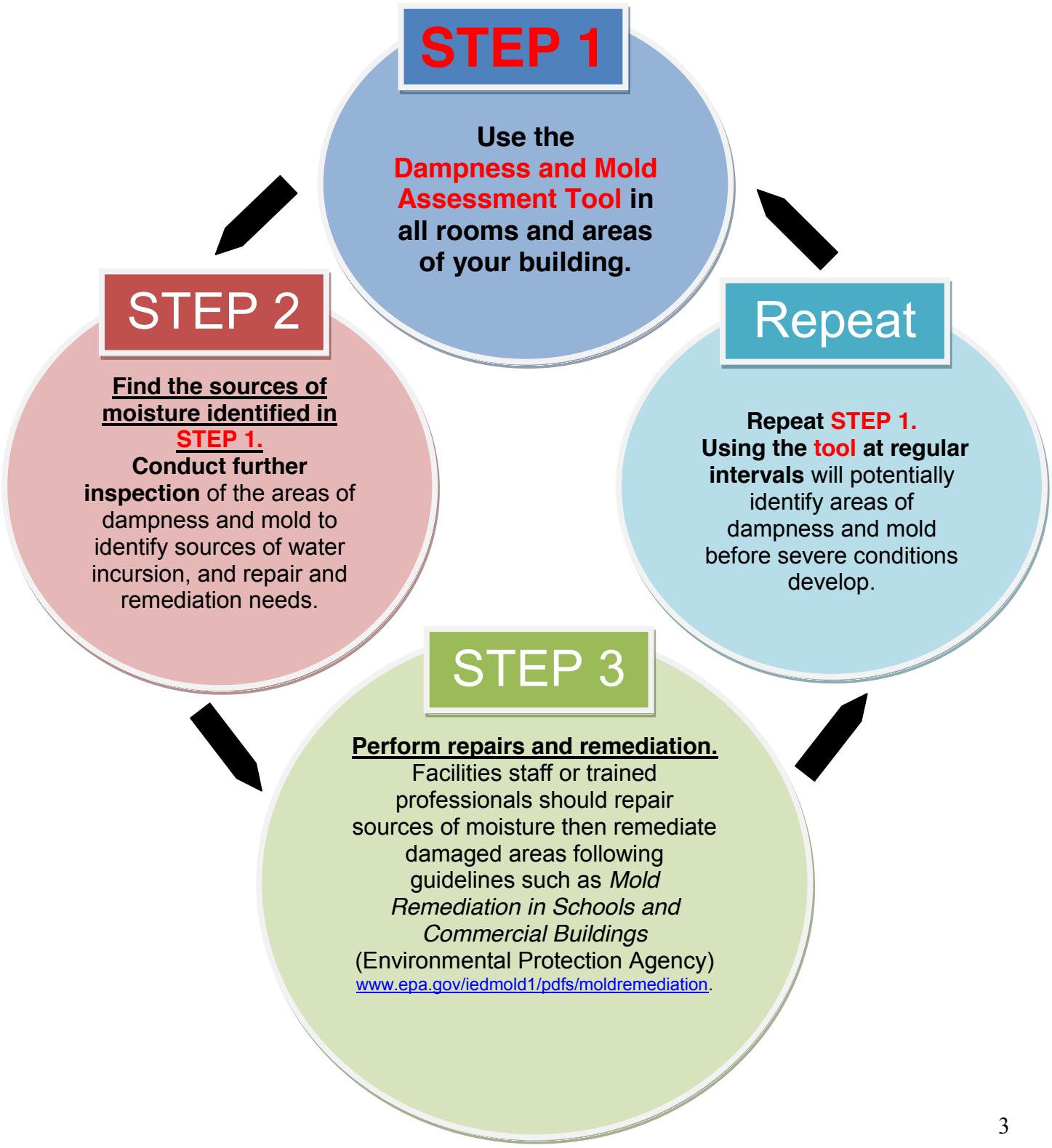
☑ **Identify and record** areas of dampness or mold throughout your building.

☑ **Trigger early repair and remediation** to avoid potential health effects and more costly repair and remediation.

☑ **Create awareness** of potential problem areas.

☑ **Track (monitor)** past and present problem areas by repeating the use of this tool at the frequency which your individual facility determines.

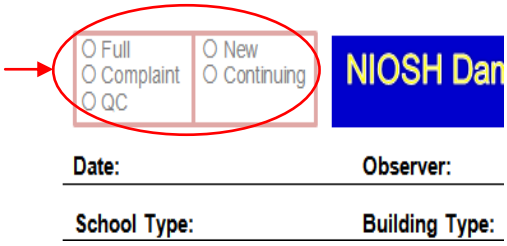
The Assessment, Identification, Repair, and Remediation Cycle



Instructions for Using the FORM

Individuals who are experiencing respiratory health symptoms are cautioned about using the form in potential problem areas if they have concerns that exposures to dampness and mold are related to their symptoms.

1) For your record keeping, fill-in the bubble that describes the purpose of your assessment:



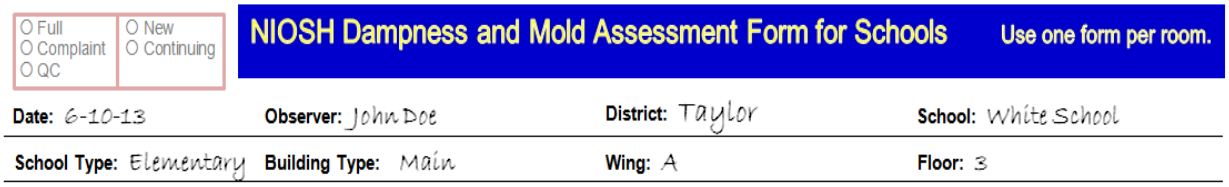
O Full = Full building assessment.
O Complaint = Assessment in response to a complaint.
O QC = Quality Control assessment.

AND

O New = New assessment.
O Continuing = Continuing with an ongoing assessment.

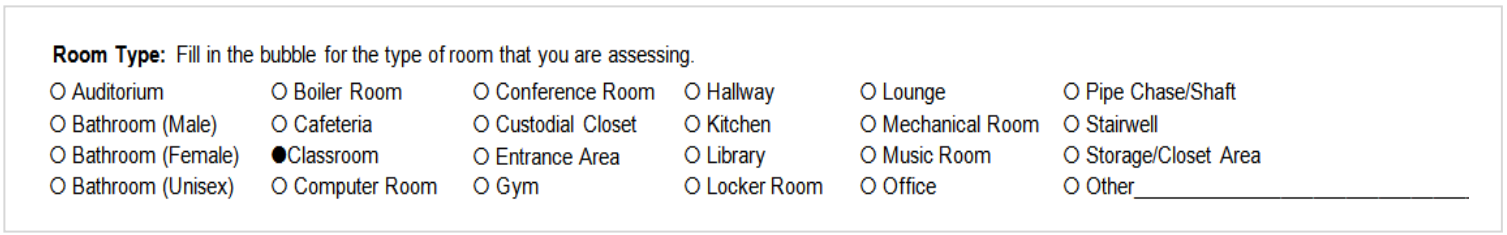
2) Complete the information listed at the top of the form starting with the date.

Example:



3) Fill in the bubble for the type of room you are assessing.

Example:



4) Provide the number of the room you are assessing.

Example:

Room Number: 212

IF THERE IS NO ROOM NUMBER: Enter the name, number, or other information of the room/area nearest to the one you are assessing.

Example:

If there is no room number, enter the number or name (e.g., Library) of the nearest room using the following choices:

Across from the library Next to _____ Inside of _____ Near _____

5) Fill in any observation of **MOLD ODOR**. Be sure to smell for mold odor when you first walk into each room. When listing a source, refer to the first (yellow shaded) column on the left of the page. Determine subjectively whether a smell is **mild**, **moderate**, or **strong,** and identify the source of the odor. If you cannot determine the source, fill in the bubble.

Example:

MOLD ODOR: *Be sure to smell for mold odor when you first walk into the room/area.* Fill in the appropriate bubble/s.

⓪ NONE ① MILD ● MODERATE ③ STRONG Source of MOLD ODOR? the carpet ○ Source Unknown

6) Place a check (✓) in the first (yellow shaded) column for all of the room components (next column) found in the room you are assessing. Because all areas must have a ceiling, walls, and a floor, those components are automatically checked.

Example:

Automatically checked.

Check (✓) if component is in the room/area.	
✓	Ceiling
✓	Walls
✓	Floor
	Windows
✓	Furnishings
	HVAC systems
✓	Supplies & Materials
	Pipes
	Other_____
	Column Totals
	Column Averages

Components should be **systematically** assessed in the order given. If a room has other components you will assess than those listed, write the name of the components on the line provided next to the "**Other**" row.

7) In the next three columns, for each component in the room with identified problem areas, score the combined size of the following observed areas: **Damage or Stains, Visible Mold, and Wet or Damp**. Base scores solely on size.

Example:

DAMAGE or STAINS	VISIBLE MOLD	WET or DAMP
0 **1** 2 3	0 **1** 2 3	0 **1** 2 3
0 **1** 2 3	0 **1** 2 3	0 **1** 2 3
0 1 2 **3**	0 1 **2** 3	0 1 **2** 3
0 1 2 **3**	0 1 **2** 3	0 1 **2** 3

Determining size-based scores is explained further on the next page.

8) If you do not find damage, put a check in the "Nothing Found" column.

Example:

Check (✓) if component is in the room/area.		Check (✓) if nothing found.
✓	Ceiling	
✓	Walls	✓
✓	Floor	
	Windows	
✓	Furnishings	✓
	HVAC systems	
✓	Supplies & Materials	✓
	Pipes	
	Other_____	

Nothing was found on the **walls**, **furnishings**, or **supplies & materials** for this assessment.

9) Provide additional information in the "**Notes**" column

Example:

MOLD	DAMP		
1 2 3	0 1 2 3	Row Totals	Notes
1 2 3	0 1 2 3		Ceiling tiles had large water stains and damaged areas.
1 2 3	0 1 2 3		

7) Do *not* complete the gray areas for "**Column Totals**", "**Column Averages**" , or "**Row Totals**". Save this for later.

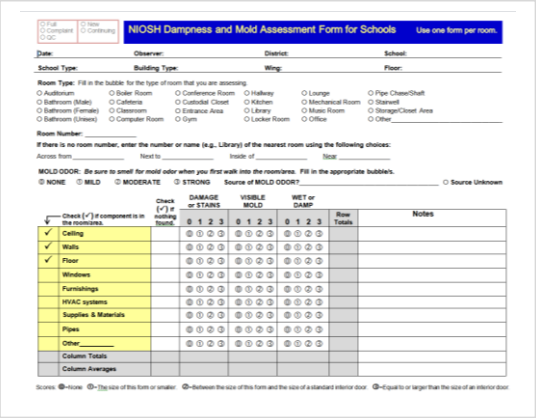
	Row Totals
Column Totals	
Column Averages	

Determining Size-Based Scores

Scoring is based on **damaged or effected sizes of areas**:

0 = NONE

1 = The total size of the area or areas for Damage/Stain, Visible Mold, or Wet/Damp that are approximately the **size of the actual "Dampness and Mold Assessment Form" or smaller**.



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○ Bathroom (Unisex)	○ Computer Room	○ Gym	○ Locker Room	○ Office	○ Other_____

Room Number: _____

If there is no room number, enter the number or name (e.g., Library) of the nearest room using the following choices:

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MOLD ODOR: *Be sure to smell for mold odor when you first walk into the room/area.* Fill in the appropriate bubble/s.

① NONE ① MILD ① MODERATE ① STRONG Source of MOLD ODOR?_____ ○ Source Unknown

Check (✓) if component is in the room/area.		Check (✓) if nothing found	DAMAGE or STAINS 0 1 2 3	VISIBLE MOLD 0 1 2 3	WET or DAMP 0 1 2 3	Row Totals	Notes
✓	Ceiling		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
✓	Walls		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
✓	Floor		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
	Windows		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
	Furnishings		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
	HVAC systems		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
	Supplies & Materials		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
	Pipes		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
	Other_____		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
	Column Totals						
	Column Averages						

Scores: ⓪=None ①=The size of this form or smaller ②=Between the size of this form and the size of a standard interior door ③=Equal to or larger than the size of an interior door

Form size = 8 ½ inches X 11 inches

2 = The total size of the area or areas for Damage/Stain, Visible Mold, or Wet/Damp that are **between** the **size of the "Dampness and Mold Assessment Form" and** the **size of a standard interior door.**

Door size = 32 inches X 80 inches

3 = The total size of the area or areas for Damage/Stain, Visible Mold, or Wet/Damp that are **equal to or larger than the size of an interior door.**

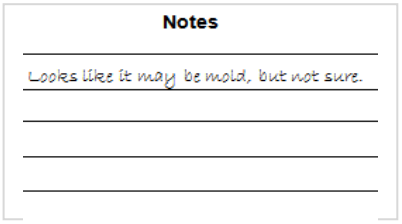
Special Notes

- **Fill in scores for each of the three columns (Damage or Stains, Visible Mold, Wet or Damp) – EVEN if the score is "0".**

> Remember the **scoring is based on size**, not on density or darkness of the stain or mold.

- **Is it a stain or is it mold?** Most of the time this is difficult to determine. If you are not certain what you see is mold:

  1) Mark as "**None**" in the "**Visible Mold**" column.
  2) Score the size of the stain in the "**Damage or Stains**" column.
  3) Write a note in the "**Notes**" column.



  If you observe severe areas of damage or visible mold:

  1) Score according to size for both "**Damage or Stains**" and "**Visible Mold**".
  2) Write a note in the "**Notes**" column on how severe you observe the area to be.

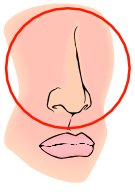
- **Is it currently wet or damp?** Only score areas showing obvious signs of moisture (e.g. condensation, dripping, etc.) by visual inspection.

- If you observe areas of moisture **on fixtures,** such as condensation **on pipes under toilets and sinks**, include your observations by filling in the appropriate bubble for the size of the affected area in the "**Wet or Damp**" column and make a note in the "**NOTES**" section.

> Photographs can be useful for documenting conditions. You may consider taking a photograph of an area that appears to be severe and referring to the photograph in the "Notes" column.

- If you notice a stain on an item that appears **unrelated to sources of water incursion within the room**, include this in the "**NOTES**" section.

- After being in a building for a lengthy period of time, it may become **difficult to determine if there is a mold odor present in a room**. To prevent this problem, we recommend that you take periodic breaks outside of the building. If you smell something other than mold odor, include this in the "**NOTES**" column. Always try to detect the smell of mold *immediately* as you enter each room.

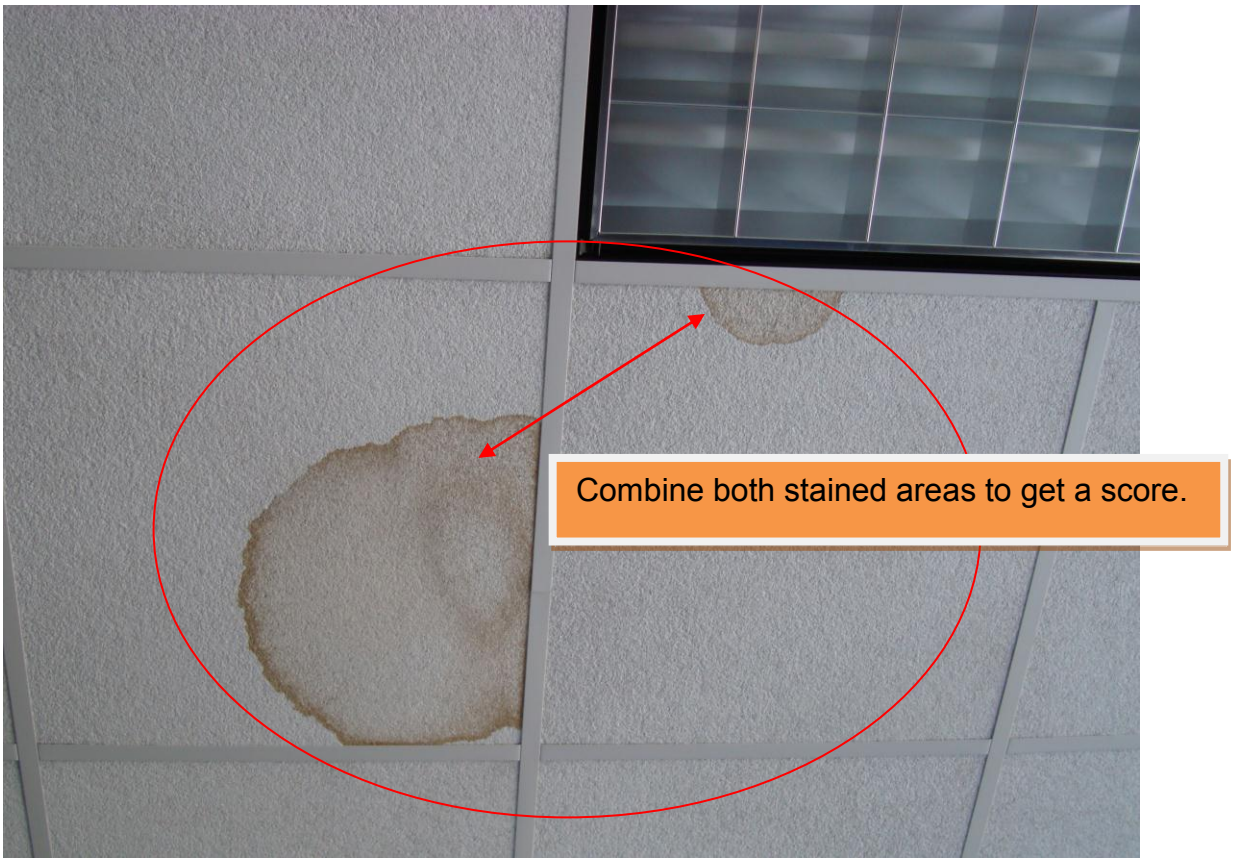


The Nose

Example 1

Example 1: Assessing the CEILING

Picture of stained ceiling tiles. These two stains were the only stains observed on the entire ceiling in this room. If there were other areas of damage/stain, visible mold, or damp/wet conditions, you would also combine the size of those areas for one score for the entire ceiling.



1) Damage or Stain

The damage to this ceiling area appears to be somewhat Extensive. A score for this would be a **2** because both stains together are bigger than the size of the assessment form but smaller than a standard interior door.

2) Visible Mold

It is hard to determine if there is mold in this example, so you might score this as a **0**, but note (in the "Notes" column) that there may be mold growth.

3) Wet or Damp

Both areas feel damp by touch and both together appear to be larger than the size of the assessment form but smaller than the size of a standard interior door. This example would have a score of **2**.

DAMAGE or STAINS				VISIBLE MOLD				WET or DAMP			
0	1	2	3	0	1	2	3	0	1	2	3
⓪	①	●	③	●	①	②	③	⓪	①	●	③

Example 1

Example 2: Assessing the WALLS

Picture of wall and floor. This area of wall damage and mold is the only problem area observed on all the walls in this room. If there were other areas of damage/stain, visible mold, or wet/damp conditions, you would also combine the size of those areas for one score for all the walls in the room.

It should be noted in the "Notes" box that the damage and mold in this example appear to be severe.

Notes

Damage to the lower wall is severe – moldy and wall material is crumbling.

1) Damage or Stain

There appears to be a large area of visible mold and damage to the wall in this example. The score would be **2** because the area is bigger than the size of the assessment form and smaller than a standard interior door.

2) Visible Mold

The area of visible mold appears to be significant. The score would be **2** because the area is bigger than the size of the assessment form and smaller than a standard interior door.

3) Wet or Damp

Current moisture in this example was not identified. Therefore, the score is **0**.

DAMAGE or STAINS	VISIBLE MOLD	WET or DAMP
0 1 2 3	0 1 2 3	0 1 2 3
⓪ ① ● ③	⓪ ① ● ③	● ① ② ③

How to Calculate Total or Average Scores per Room Method I

The purpose of scoring is to document and compare conditions over time.

There are two ways you can choose to score your results using hardcopies. Method I is calculating total scores per room, and Method II is calculating average scores per room. **When the software for this tool becomes available, it will automatically provide results and summary reports based on both methods when data is entered.**

Scoring Method I – Total Room Score

After completing the assessment form:

A - Add circled numbers in each **column** and enter in "**Column Totals**"

B - Add circled numbers in each **row** and enter in "**Row Totals**"

C - Add the 3 column totals for the Total Room Score. **Example:** 8 + 3 + 7 = **18**

Check (✓) if component is in the room/area.		Check (✓) if nothing found.	DAMAGE or STAINS 0 1 2 3	VISIBLE MOLD 0 1 2 3	WET or DAMP 0 1 2 3	Row Totals
✓	Ceiling		0 ● 2 3	● 1 2 3	0 ● 2 3	2 ← B
✓	Walls		0 1 2 ●	● 1 2 3	0 1 ● 3	5
✓	Floor		0 1 2 ●	● 1 2 3	0 1 2 ●	6
✓	Windows	✓	0 1 2 3	0 1 2 3	0 1 2 3	
✓	Furnishings		● 1 2 3	0 1 2 ●	● 1 2 3	3
✓	HVAC systems	✓	0 1 2 3	0 1 2 3	0 1 2 3	
✓	Supplies & Materials		0 ● 2 3	● 1 2 3	0 ● 2 3	2
✓	Pipes	✓	0 1 2 3	0 1 2 3	0 1 2 3	
	Other_____		0 1 2 3	0 1 2 3	0 1 2 3	
	Column Totals		8	3	7	18 ← C (Total Room Score)
	Column Averages		1.0	0.375	0.875	0.75

How to Calculate Total or Average Scores per Room Method II

Scoring Method II – Average Room Score

After completing the assessment form:

Complete **Scoring Method I** for total room score.

A - In each column (Damage or Stains, Visible Mold, Wet or Damp):

Divide the **column total** by the **total number of components** in the room/area checked in the first column. Put this number in the **Column Averages** rows.

Example: For the **Damage or Stains** column the total score is **8** and the number of components is also **8**. Therefore, the column average is: 8 ÷ 8 = **1.0**

B - Add all column averages (1.0 + 0.375 + 0.875 = 2.25) and divide by 3 to get an **Average Room Score.**

Example: 2.25 ÷ 3 = **0.75**

Check (✓) if component is in the room/area.		Check (✓) if nothing found.	DAMAGE or STAINS 0 1 2 3	VISIBLE MOLD 0 1 2 3	WET or DAMP 0 1 2 3	Row Totals
✓	Ceiling		0 ● 2 3	● 1 2 3	0 ● 2 3	2
✓	Walls		0 1 2 ●	● 1 2 3	0 1 ● 3	5
✓	Floor		0 1 2 ●	● 1 2 3	0 1 2 ●	6
✓	Windows	✓	0 1 2 3	0 1 2 3	0 1 2 3	
✓	Furnishings		● 1 2 3	0 1 2 ●	● 1 2 3	3
✓	HVAC systems	✓	0 1 2 3	0 1 2 3	0 1 2 3	
✓	Supplies & Materials		0 ● 2 3	● 1 2 3	0 ● 2 3	2
✓	Pipes	✓	0 1 2 3	0 1 2 3	0 1 2 3	
	Other_____		0 1 2 3	0 1 2 3	0 1 2 3	
	Column Totals		8	3	7	18
	Column Averages		1.0	0.375	0.875	0.75

A → Column Averages

Average Room Score ← B

○ Full ○ Complaint ○ QC	○ New ○ Continuing

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Use one form per room.

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School Type: **Building Type:** **Wing:** **Floor:**

Room Type: Fill in the bubble for the type of room that you are assessing.

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○ Bathroom (Male)	○ Cafeteria	○ Custodial Closet	○ Kitchen	○ Mechanical Room	○ Stairwell
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Room Number: _____

If there is no room number, enter the number or name (e.g., Library) of the nearest room using the following choices:

Across from _____ Next to _____ Inside of _____ Near _____

MOLD ODOR: ***Be sure to smell for mold odor when you first walk into the room/area.*** **Fill in the appropriate bubble/s.**

⓪ **NONE** ① **MILD** ② **MODERATE** ③ **STRONG** **Source of MOLD ODOR?**_____ ○ **Source Unknown**

Check (✓) if component is in the room/area.		Check (✓) if nothing found.	DAMAGE or STAINS 0 1 2 3	VISIBLE MOLD 0 1 2 3	WET or DAMP 0 1 2 3	Row Totals	Notes
✓	Ceiling		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
✓	Walls		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
✓	Floor		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
	Windows		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
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	Supplies & Materials		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
	Pipes		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
	Other_____		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
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