

Client: EMLab P&K (QA)  
 C/O: Mr. Quality Control  
 Re: Sample Report

Date of Sampling: 02-01-2013  
 Date of Receipt: 02-01-2013  
 Date of Report: 02-08-2013

**MoldRANGE™ CFA: Extended Outdoor Comparison**

**Outdoor Location: 1, Outside Reference**

| Fungi Identified *                     | Outdoor data | Typical Outdoor Data by Date† |     |     |      |           |        | Typical Outdoor Data by Location‡ |     |     |      |           |        |
|--|--------------|-------------------------------|-----|-----|------|-----------|--------|-----------------------------------|-----|-----|------|-----------|--------|
|  |              | Month: February (n=1980)      |     |     |      |           |        | State: CA (n=8974)                |     |     |      |           |        |
|  | cfu/m3       | very low                      | low | med | high | very high | freq % | very low                          | low | med | high | very high | freq % |
| Alternaria                             | 12           | 7                             | 7   | 12  | 24   | 35        | 14     | 7                                 | 11  | 12  | 24   | 35        | 18     |
| Aspergillus (total)                    | 47           | 7                             | 7   | 14  | 35   | 60        | 30     | 7                                 | 12  | 23  | 59   | 99        | 46     |
| Aspergillus flavus                     | 12           | 5                             | 5   | 12  | 17   | 23        | 1      | 6                                 | 7   | 12  | 19   | 35        | 3      |
| Aspergillus niger                      | -            | 5                             | 7   | 12  | 24   | 35        | 13     | 7                                 | 12  | 18  | 47   | 77        | 35     |
| Aspergillus ustus                      | -            | -                             | -   | -   | -    | -         | < 1    | 3                                 | 7   | 12  | 18   | 35        | < 1    |
| Aspergillus versicolor                 | 35           | 7                             | 7   | 12  | 25   | 58        | 8      | 7                                 | 7   | 12  | 24   | 36        | 6      |
| Aureobasidium                          | 12           | 7                             | 7   | 12  | 24   | 35        | 14     | 7                                 | 9   | 12  | 24   | 42        | 17     |
| Basidiomycetes††                       | -            | 8                             | 14  | 59  | 160  | 370       | 8      | 6                                 | 7   | 23  | 95   | 180       | 1      |
| Chaetomium                             | -            | 7                             | 7   | 12  | 20   | 35        | 2      | 7                                 | 9   | 12  | 18   | 35        | < 1    |
| Cladosporium                           | 180          | 12                            | 24  | 120 | 440  | 860       | 80     | 53                                | 110 | 300 | 760  | 1,200     | 93     |
| Curvularia                             | -            | -                             | -   | -   | -    | -         | < 1    | 7                                 | 7   | 13  | 24   | 35        | < 1    |
| Fungi w/o identifying traits (total)** | 24           | 7                             | 12  | 21  | 47   | 71        | 62     | 7                                 | 12  | 21  | 35   | 47        | 62     |
| Arthrospore-former                     | -            | 12                            | 20  | 52  | 130  | 250       | 4      | 7                                 | 12  | 35  | 140  | 290       | 2      |
| Non-sporulating fungi                  | 24           | 7                             | 12  | 21  | 36   | 67        | 60     | 7                                 | 12  | 18  | 35   | 47        | 62     |
| Nigrospora                             | -            | -                             | -   | -   | -    | -         | < 1    | -                                 | -   | -   | -    | -         | < 1    |
| Penicillium                            | 130          | 10                            | 12  | 35  | 100  | 180       | 67     | 12                                | 24  | 57  | 140  | 250       | 85     |
| Rhizopus                               | 12           | 5                             | 7   | 11  | 12   | 18        | 3      | 7                                 | 7   | 12  | 12   | 18        | 9      |
| Stachybotrys chartarum                 | -            | -                             | -   | -   | -    | -         | < 1    | 9                                 | 12  | 12  | 18   | 21        | < 1    |
| Torula                                 | -            | -                             | -   | -   | -    | -         | < 1    | -                                 | -   | -   | -    | -         | < 1    |
| Ulocladium                             | -            | 7                             | 7   | 12  | 18   | 24        | 3      | 7                                 | 7   | 12  | 18   | 24        | 6      |
| Yeasts                                 | 12           | 7                             | 12  | 23  | 47   | 79        | 38     | 7                                 | 12  | 24  | 53   | 94        | 39     |
| <b>§ TOTAL CFU/m3</b>                  | <b>420</b>   |                               |     |     |      |           |        |                                   |     |     |      |           |        |

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\* Most fungi identified on fungal culture media are generally capable of growing on wet building materials in addition to growing outdoors. Building related growth is dependent upon the fungal type, moisture level, type of material, and other factors. *Cladosporium* is one of the predominant colony types worldwide and is frequently present in high numbers. *Penicillium/Aspergillus* species colonize both outdoor and indoor wet surfaces rapidly and are very easily dispersed. Other genera are usually present in lesser numbers indoors.

† The Typical Outdoor Data by Date represents the typical outdoor cfu (colony forming unit) levels for the location and time frame indicated. The last column represents the frequency of occurrence. The very low, low, med, high, and very high values represent the 10, 20, 50, 80, and 90 percentile values of the colony type when it is detected. For example, if the frequency of occurrence is 63% and the low value is 53, it would mean that the given colony type is detected 63% of the time and, when detected, 20% of the time it is present in levels above the detection limit and below 53 cfu/m3. These values are updated periodically, and if enough data is not available to make a statistically meaningful assessment, it is indicated with a dash.

‡ The Typical Outdoor Data by Location represents the typical outdoor cfu levels for the region indicated for the entire year. As with the Typical Outdoor Data by Date, the four columns represent the frequency of occurrence and the typical low, medium, and high concentration values for the colony type indicated. These values are updated periodically, and if enough data is not available to make a statistically meaningful assessment, it is indicated with a dash.

†† Basidiomycete colonies are identifiable when distinctive clamp connection are observed. Clamp connections do not always develop in culture nor do they develop in all species of basidiomycetes. As a result, some basidiomycete colonies may be identified as non-sporulating fungi.

\*\* Many fungi do not adapt well to routine mycologic media and growth conditions and therefore, may not sporulate at all or in a manner that facilitates identification. Unless distinctive colony types are formed, identification to genus or species is not possible, significantly reducing the usefulness of this section of data since it is a compilation of many different types of fungi.

§ Total cfu/m3 has been rounded to two significant figures to reflect analytical precision. Positive hole correction chart used for all calculations.

Interpretation of the data contained in this report is left to the client or the persons who conducted the field work. This report is provided for informational and comparative purposes only and should not be relied upon for any other purpose. "Typical outdoor data" are based on the results of the analysis of samples delivered to and analyzed by Eurofins Built Environment Testing and assumptions regarding the origins of those samples. Sampling techniques, contaminants infecting samples, unrepresentative samples and other similar or dissimilar factors may affect these results. In addition, Eurofins Built Environment Testing may not have received and tested a representative number of samples for every region or time period. Eurofins Built Environment Testing hereby disclaims any liability for any and all direct, indirect, punitive, incidental, special or consequential damages arising out of the use or interpretation of the data contained in, or any actions taken or omitted in reliance upon, this report.

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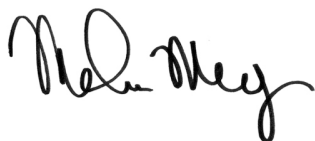
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**PROJECT ANALYST AND SIGNATORY REPORT**

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**Project Analyst**



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**Analyst:** Malcolm Moody

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‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".