**Eurofins EPK Built Environment Testing, LLC** 111 Anza Boulevard, Suite 122, Burlingame, CA 94010 (800) 651-4802 www.eurofinsus.com/Built

Date of Sampling: 01-11-2013 Date of Receipt: 01-11-2013 Date of Report: 01-11-2013 Client: EMLab P&K (QA) C/O: Mr. Quality Control Re: Sample Report

## MoldRANGE<sup>TM</sup>: Extended Outdoor Comparison

**Outdoor Location: 1, Outside Reference** 

Fungi Identified	Outdoor	Typical Outdoor Data by Date†				Typical Outdoor Data by Location‡			
	data	Month: January				State: CO			
	spores/m3	low	med	high	freq %	low	med	high	freq %
Generally able to grow indoors*									
Alternaria	13	7	17	240	25	7	53	440	42
Bipolaris/Drechslera group	-	7	13	210	9	7	13	200	6
Chaetomium	-	7	13	250	7	7	13	140	4
Cladosporium	1,200	13	210	5,200	81	20	270	5,400	89
Curvularia	-	7	17	500	9	7	13	320	5
Epicoccum	13	7	13	230	15	7	17	260	17
Fusarium	13	7	13	170	2	-	-	-	< 1
Nigrospora	-	7	13	160	9	7	13	160	4
Penicillium/Aspergillus types	640	13	160	2,100	72	13	110	1,700	48
Stachybotrys	-	7	13	1,100	3	7	13	660	1
Torula	-	7	13	170	5	7	13	160	3
Ulocladium	13	7	13	110	5	7	13	67	2
Seldom found growing indoors**									
Ascospores	320	7	89	2,100	57	10	110	3,500	57
Basidiospores	750	13	200	9,100	84	13	160	8,100	77
Botrytis	27	7	20	280	7	7	33	210	1
Pyricularia	13	7	13	270	2	_	-	-	< 1
Rusts	13	7	13	240	8	7	20	430	9
Smuts, Periconia, Myxomycetes	40	7	27	290	48	7	67	2,400	63
§ TOTAL SPORES/m3	3,000								

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## MoldRANGETM: Extended Outdoor Comparison

† The Typical Outdoor Data by Date represents the typical outdoor spore levels across North America for the month indicated. The last column represents the frequency of occurrence. The low, medium, and high values represent the 2.5, 50, and 97.5 percentile values of the spore 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 spore type is detected 63% of the time and, when detected, 2.5% of the time it is present in levels above the detection limit and below 53 spores/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 spore 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 spore 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.

§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

- \* The spores in this category 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 spore 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.
- \*\* These fungi are generally not found growing on wet building materials. For example, the rusts and smuts are obligate plant pathogens. However, in each group there are notable exceptions. For example, agents of wood decay are members of the basidiomycetes and high counts of a single morphological type of basidiospore on an inside sample should be considered significant.

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 EMLab P&K 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 EMLab P&K may not have received and tested a representative number of samples for every region or time period. Eurofins EMLab P&K 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.