



CAVALIER INDUSTRIES LTD.

## IAQ IN PERSPECTIVE

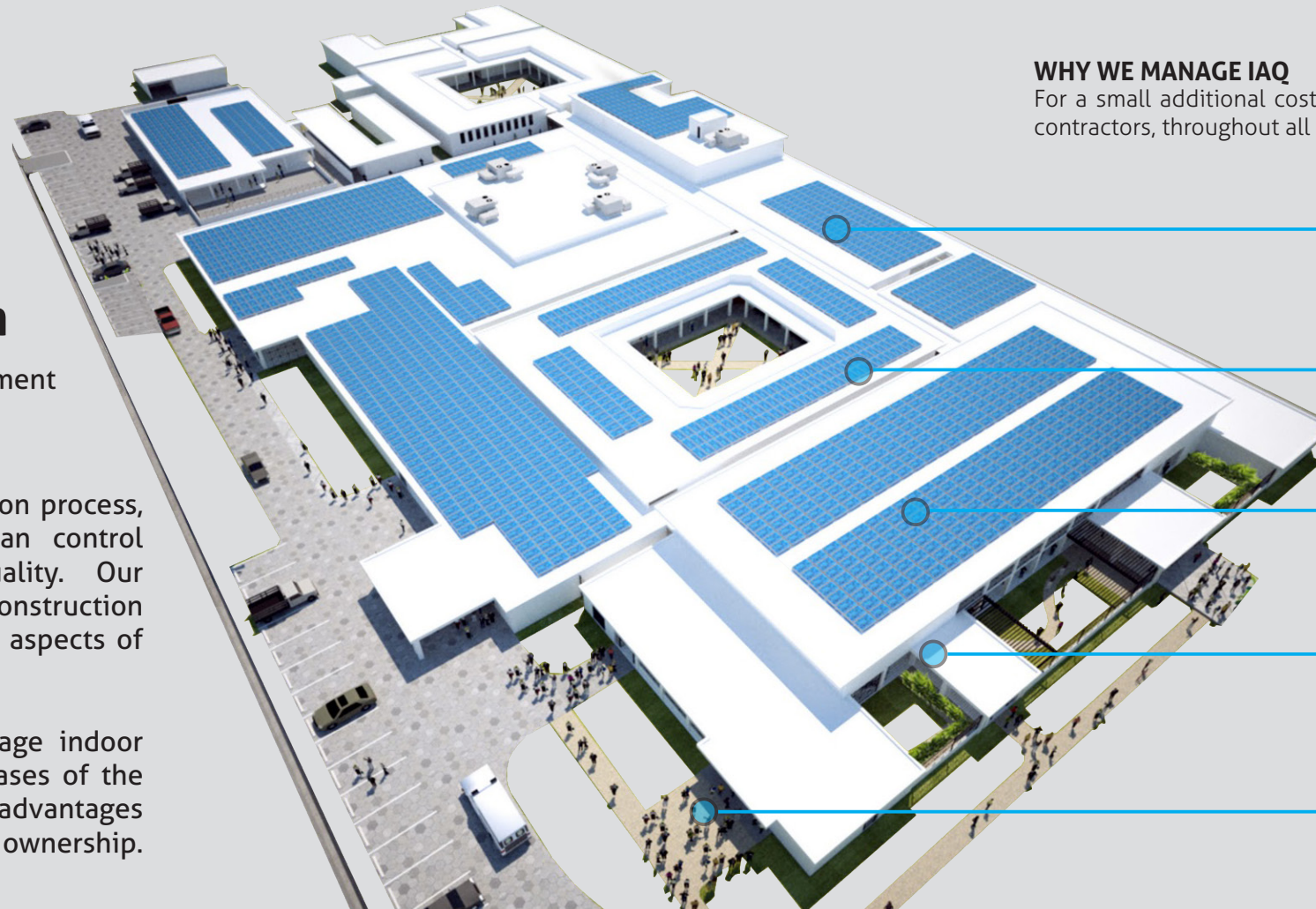
# IAQ control, during construction

How to utilize temporary IAQ equipment during construction.

Cavalier Industries Ltd. - 2013

Our goal throughout the construction process, is to provide equipment that can control temperature, humidity, and air quality. Our solution can span from green field construction to final occupancy and improve all aspects of the job.

Our ability to systematically manage indoor air quality through the various phases of the construction process provides many advantages for general contractors, and building ownership.



## WHY WE MANAGE IAQ

For a small additional cost IAQ control provides incredible value for contractors, throughout all stages of construction, from start to finish.

**1** Create the ideal curing environment: drywall mud, mortars, coatings, and building materials cure on-site, on-time, as specified.



**2** Protect sensitive millwork, by controlling humidity line with AWMAC (Architectural woodwork manufacturers association of Canada) specs.



**3** Create an ideal curing environment for concrete, and concrete coatings. Reduce the use of permeable moisture barriers and reduce time/cost.



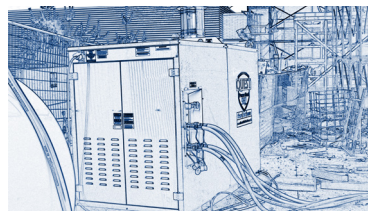
**4** Reduce deficiencies: Maintain temp and humidity to reduce expansion and contraction of building materials, drive down related costs of deficiencies.



**5** Provide workers with an optimal work environment to create a safe, productive job site.



## EQUIPMENT SOLUTIONS



### Glycol Heating Systems

Cost effective / highly efficient.  
Easy to distribute heat in partitioned spaces.  
Ideal for high rise heating.  
Multiple fuel options



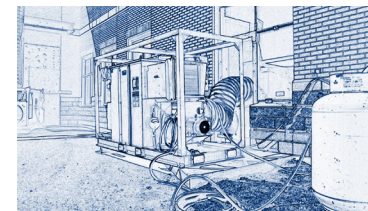
### In-Direct Heating Systems

Highly efficient.  
High static pressure/CFM fans  
Ductable to 400'  
Heat large open spaces effectively  
Positively pressurize building.



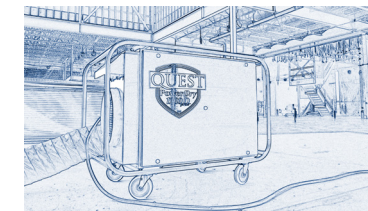
### HEPA Filtration Systems

Used to control air quality, meet infection control guidelines by creating neg air barriers as required, protect HVAC system during construction.



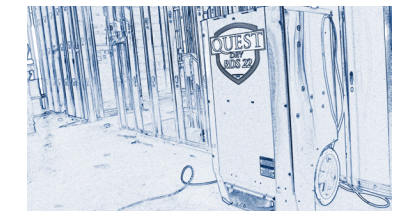
### Large Desiccant DEHU

For use maximum dew point depression is needed.  
Dry large areas and buildings efficiently and rapidly.  
De-humidistat controlled for automatic operation.



### Small Desiccant DEHU

High power dehumidification combined with portability.  
Single Phase operation.  
Easy and simple setup.  
De-humidistat controlled for automatic operation.

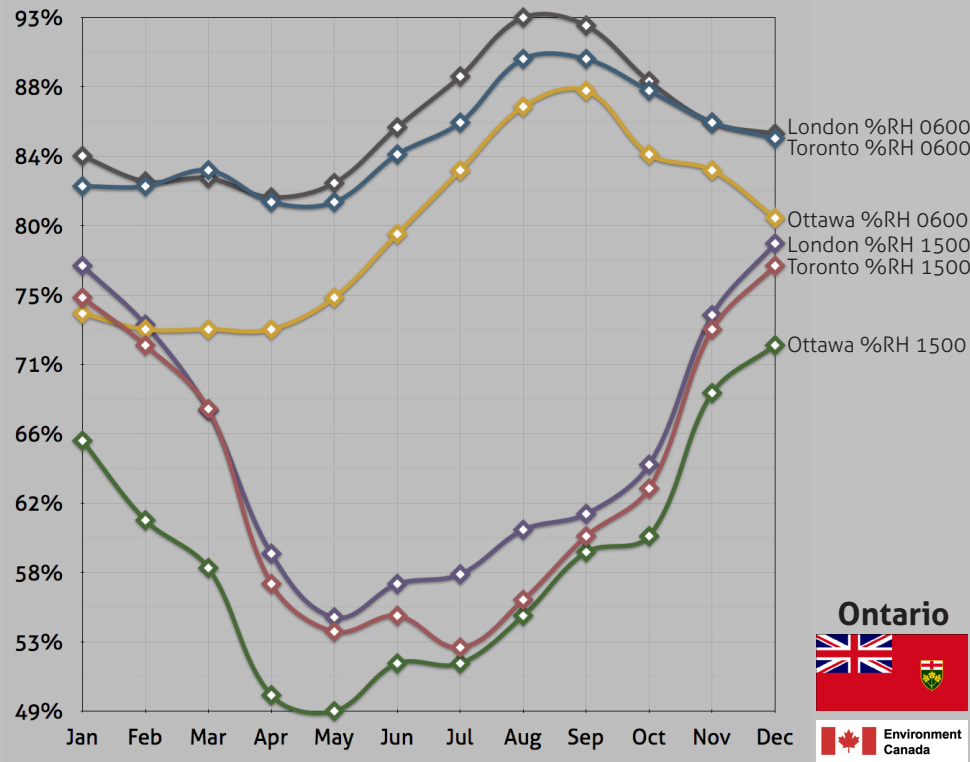


### Refrigerant DEHU

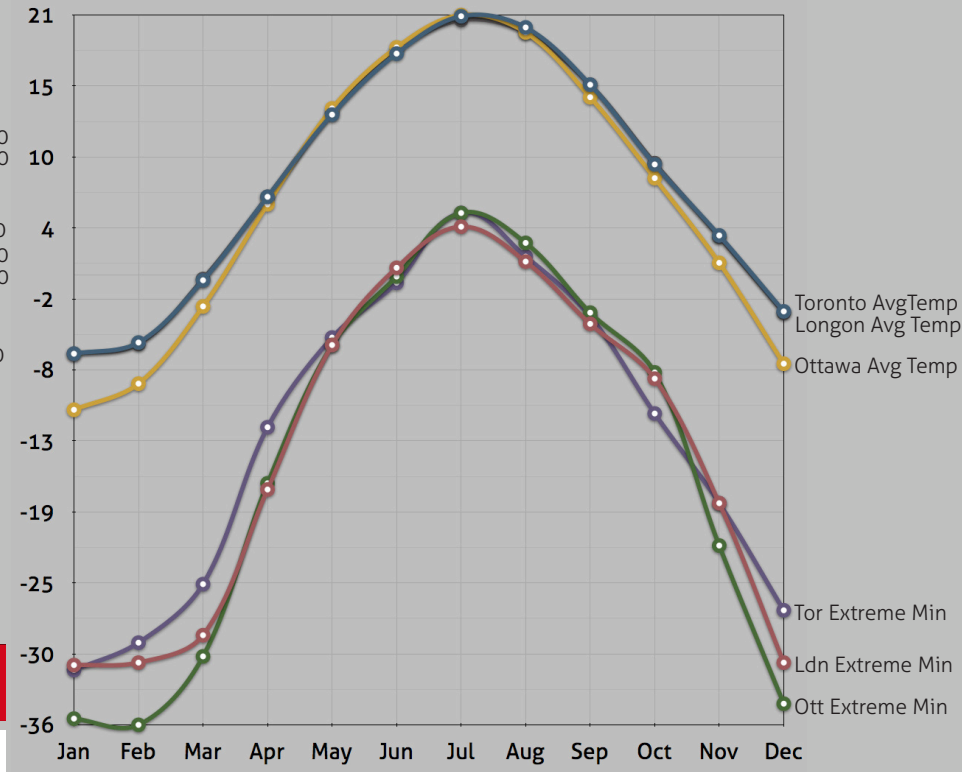
Low power consumption, highly effective, plug in anywhere solution.  
De-humidistat option standard  
Easy setup and move  
Low grain refrigerant design



## ON AVERAGE RELATIVE HUMIDITY (%) 6AM & 3PM



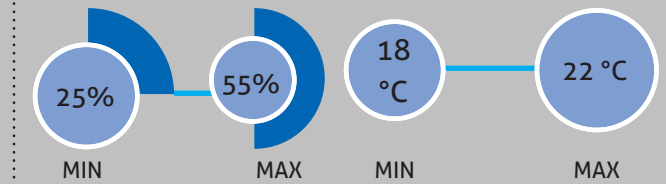
## ON AVERAGE TEMPERATURE (°C)



Source: Environment Canada historical weather

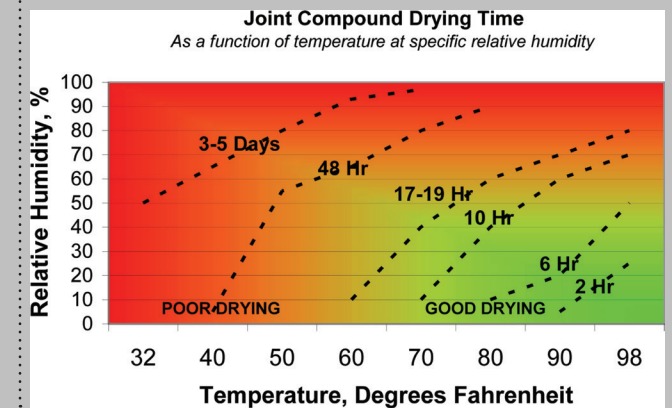
## CREATE THE IDEAL ENVIRONMENT

### GOAL FOR HUMIDITY GOAL FOR TEMP



Set the goal and strive to maintain it.

The benchmark for temporary IAQ control should be to duplicate, as closely as possible, permanent specifications for temperature and relative humidity.

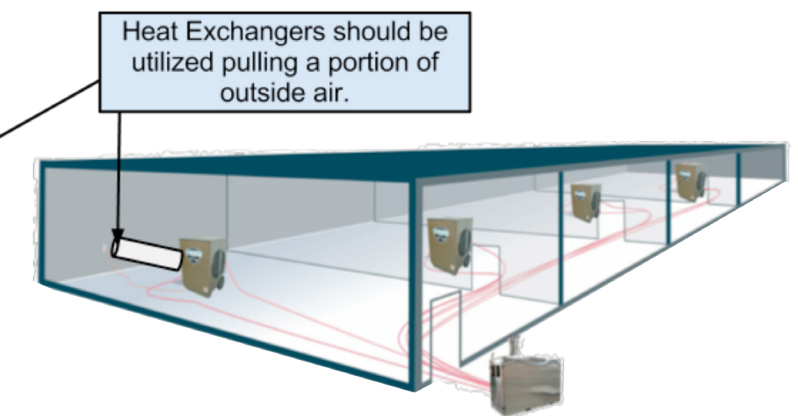
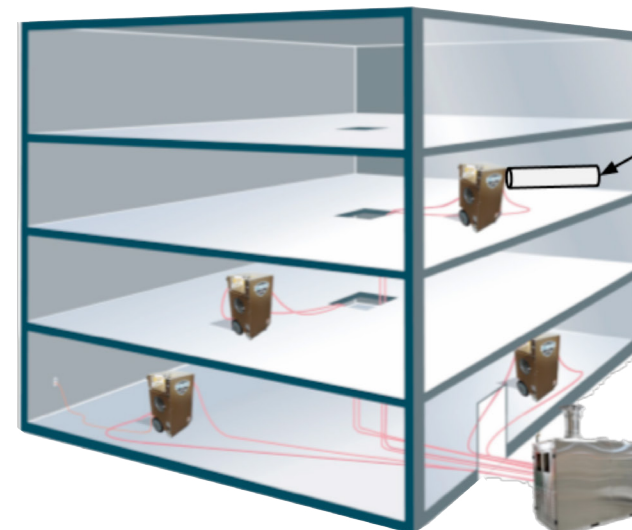
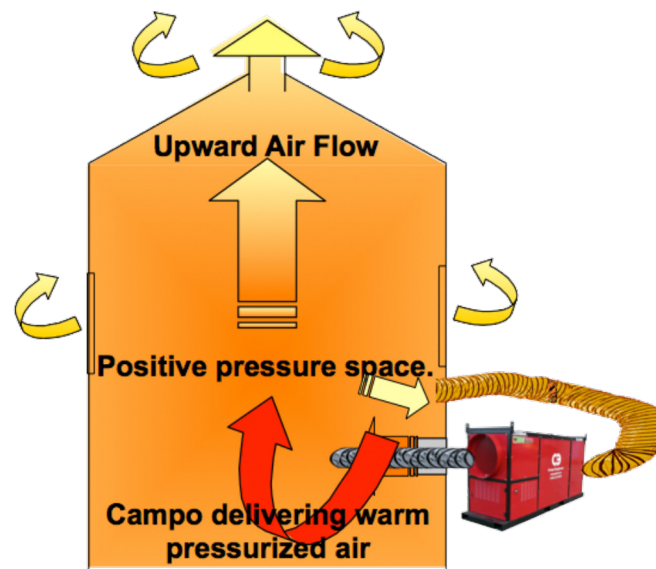


## EQUIPMENT SOLUTIONS



**Humidification Systems**  
Automatically controlled humidification systems connect to city water source and humidify as required to maintain minimum humidity requirements. Designed to operate on 120v connections with simple garden hose fitting. Humidistat controlled.

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Cavalier Industries Ltd  
Toll Free: 1-888-483-4843  
sales@cavalier-industries.ca