

## Running out of Room... in your Mechanical Room?

Let Air Flow help you find more space!

We all know that mechanical room space is basically two things: valuable and hard to come by. But making space isn't impossible and can save you time, money and mental energy in the long-run. Here are a few suggestions for creating extra space where you thought you had none.



### 1: Side Discharge Square Inlet Fan

Many fan manufacturers offer a 90-degree turn in their square inline fan to avoid an additional elbow and associated pressure drop. What's great about this fan is that there is **no drop in performance**. In fact, this square featured-fan produces slightly more air with discharge flowing off of the side.



### 2: Inlet Box for Centrifugal Fan

Keeping in mind the principle of moving air in a 90-degree direction, Loren Cook manufactures a zero-loss inlet box to solve the problem of a short distance to the inlet of a centrifugal fan. You may have seen the fan inlet as a curb cap accessory, but the inlet box is available as a pre-engineered fan accessory that can bring air to the fan inlet from any direction. The fan selection program and REVIT drawings for both fans are available at:

<http://www.lorencook.com/About/destools.htm#7>

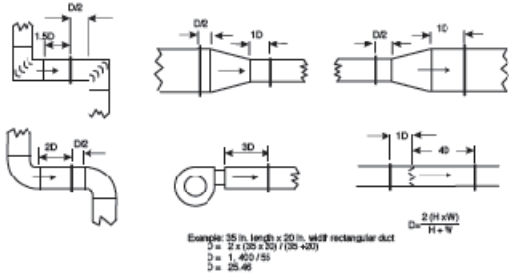
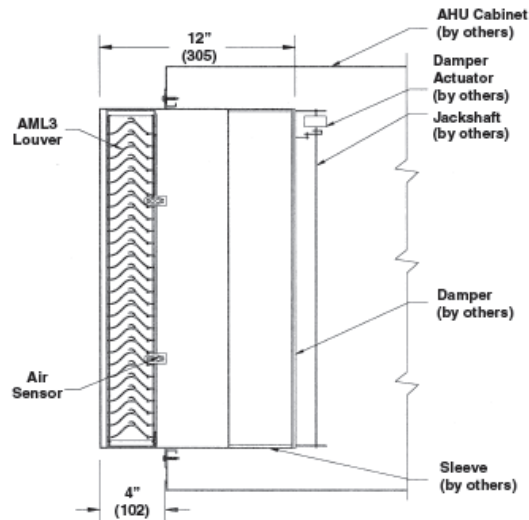
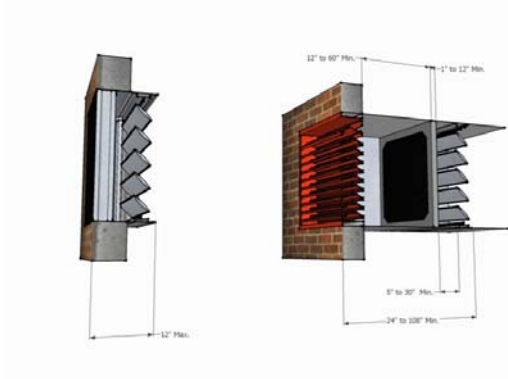


Figure 6: Minimum Mounting Dimensions

### 3. Air Measuring Louver

The straight duct required for a duct mounted air flow measuring station occupies a lot of space in a mechanical room. As a space-saver solution, consider Ruskin's AML3 air measuring louver.

The air travelling off of the back of the louver is remarkably straight and because of the velocity through the louver, the signal in velocity pressure is easy to pick up with an inexpensive pressure transducer. Because air flow is released right at the louver, there is no need for all the extra duct diameters. Below is Ruskin's installation guideline for this louver; notice the small gap between louver, duct or cabinet, and damper.



### 4. Ruskin's Fan Inlet Station

While Ruskin's fan inlet station may not save you as much room as these other products, it is valuable in another sense. This fan inlet station will reduce your pressure drop more effectively than other comparable stations which have a probe across the inlet of the fan.

Details for all of Ruskin's air flow measuring products can be found at

<http://www.ruskin.com/catalog/default.aspx?folder=499>



Looking for other equipment ideas? Visit [Air Flow](#) online. If you are interested in talking in more detail about measured air devices and their applications, perhaps for a current project, please call me directly at (414) 351-7744 or by email at [tom@airflowinc.biz](mailto:tom@airflowinc.biz). Have a topic you'd like to see discussed in the next newsletter? Please let me know.

Regards,

Tom Gelin

Air Flow, Inc.

(414) 351-7744 Direct

[tom@airflowinc.biz](mailto:tom@airflowinc.biz)