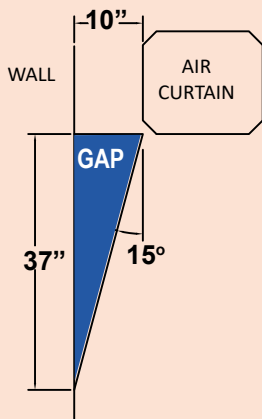
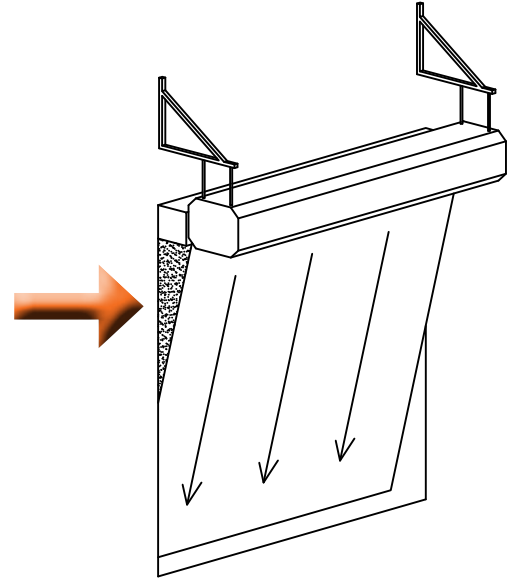


Closing the Gap:

Solving an Air Curtain Installation Issue

For optimum performance an air curtain should be mounted as close to the top of the opening and as flush to the door header as possible, but many times the installation area is far from optimum. Door tracks, roll-up canisters, door operators, pipes and other obstructions all present unique challenges to installing an air curtain that will provide the most effective results for that given application. Of notable concern are gaps that exist on either side of the door opening when there is no other solution than to mount the air curtain some distance in front of that opening.

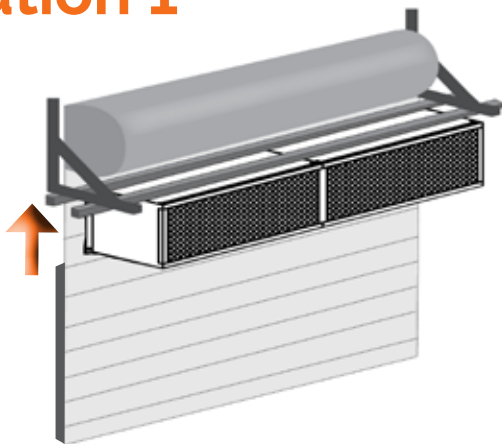


ISSUE: Moving the air curtain out will create triangular gaps on both sides that are unprotected from air entering the opening. If left open, these gaps will reduce the effectiveness of the air curtain by the ratio of the area of the gaps to the area of the door opening.

For example, if an opening is 12' high by 12' wide, and the air curtain has to be pulled 10" away from the wall. With the 15° recommended air curtain discharge angle, the airstream will reach the door opening 37" below the air curtain. The area of both triangular gaps is 2.6 square feet and the area of the door opening is 144 square feet.

The ratio of the gap area to the door opening area is 2.6/144. **So this installation will be 1.8% less effective than if the air curtain were mounted at the ideal location, flush to the wall.**

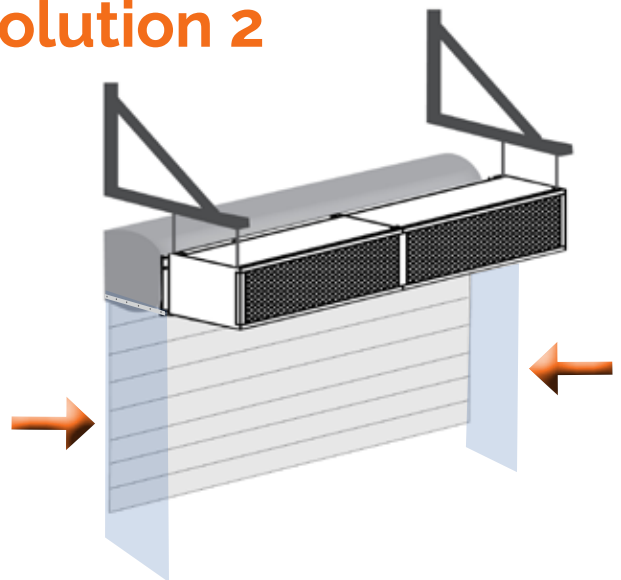
Solution 1



ELIMINATE THE GAP

If this is a new door, the canister can be raised above the top of the opening so that the air curtain installs beneath it. Struts can be added to the top of the air curtain to extend the top mounting points past the canister, and brackets added outside the canister.

Solution 2



USE SIDE BAFFLES

For maximum effectiveness, the gaps on the sides can be sealed off with a permanent barrier or PVC strips to prevent air from entering. It is recommended that the baffles extend to the floor.

Contact us for more information or to discuss your air curtain application!