The 686q Modular Fan

A SPECIFIC PURPOSE PLENUM FAN

BEST IN CLASS EFFICIENCY

Peak static efficiency up to 74% (AMCA Certified) Motor efficiency up to 94.1% (NEMA Premium)



ENGINEERED FLOW PATH

a centrifugal fan wheel patented diffuser technology reduced low frequency sound applied like conventional plenum fans

RELIABILITY

a larger wheel means lower wheel speeda larger wheel means fewer fans (bearings)quantity x speed = bearing revolutionsbottom line ... increased system reliability





VIBRATION MANAGEMENT and CONTROL

Spring isolation has been standard practice for 50 years. Some suggest that a "better" balance eliminates the need for spring isolation. ASHRAE still recommends high deflection vibration isolation.

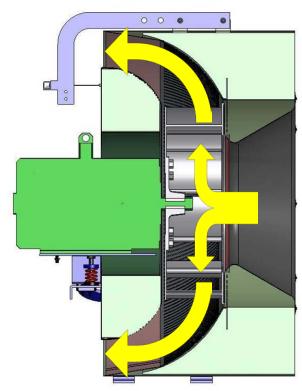
AMCA 204 - Page 9 "with time, it is expected that fan vibration will increase due to wear"

Springs offer *flexibility* - as vibration increases, springs offer the same benefit they always have - isolate a vibratory force from the building structure.



small fan acoustics large fan efficiency

Our secret to reduced low frequency sound



An engineered flow path



- * Minimize turbulence (the diffusers) ... less turbulence = less low freq.
- * Maximize sound absorption

 (12 inches of acoustic fill)
 ... 10 to 20 dB quieter in critical bands

It is no small task for a larger diameter wheel to deliver small wheel acoustics - in a reduced length air tunnel US Patents 7,001,140 and 7,357,621



A low/wide aspect ratio 63,000 CFM at 8" SP



Tall/narrow aspect ratio 78,500 CFM at 6" SP

