



KNOXVILLE, Tenn.—  
When members enter the aptly named The Rush Fitness Complex they get an endorphin rush from the entertaining, but very physical atmosphere of mountain climbing, bungee jumping, indoor batting, mechanical bull riding, plus all the conventional work-out areas and amenities expected from a health club.

KNOXVILLE, Tenn.—The Rush Fitness Complex

**FITNESS CLUB ACHIEVES  
PERFECT INDOOR AIR QUALITY  
*With Former Retail Store Retrofit.***

case study

One thing THE RUSH'S *President/CEO Larry Gurney* didn't want was a rush of air from the HVAC system. Instead of keeping the existing drafty metal ductwork with the \$1.5 million retrofit of a 40,000-square-foot former Service Merchandise anchor store in the Knoxville Center Mall, Knoxville, Tenn., Gurney chose fabric air dispersion systems to distribute even, draft-free air flow onto members. New rooftop HVAC systems totaling 49,000 cfm also incorporate approximately 25-percent outdoor air into the reconfigured air flow design as specified by Engineering Services Group, Knoxville, Tenn., the project's consulting engineering firm.

Using outside air combined with even air distribution is critical in eliminating stagnant perspiration odors associated with health clubs. The linear diffusers sewn into the entire length of the "Comfort-Flow fabric duct manufactured by DuctSox", Dubuque, Iowa, produce draft-less air flow versus the staggered placements of metal duct registers. The diffusers supply 90 percent of the air flow and the remaining 10 percent flows gently through the permeability designed into the fabric's texture. "Indoor air quality (IAQ) is as important as the visual presentation when providing a pleasant atmosphere for members to work out," said Gurney, who co-founded The Rush last year after leaving his position as southwest division president of Pleasanton, Calif.-based 24 Hour Fitness, the world's largest health club chain with over 400 locations in Europe and the U.S.

But there's more to the HVAC system than just IAQ. The 750 linear feet of fabric duct ranging from 12 to 24-inches in diameter adds to the new club's "exertainment," an industry buzz-word the 20-year health club veteran coined and now uses as one of The Rush's marketing strategies. DuctSox's premium Sedona fabric, which uses the Comfort-Flow model, is an aesthetic factor in project architect, Daryl Johnson's, Johnson Architecture, Knoxville, Tenn. fun and entertaining interior design. Johnson also included 20 television monitors, a juice bar, and other amenities in his design. Aesthetics is critical, according to Gurney, because The Rush taps into the trend of people choosing health clubs over nightclubs as places to "hang-out," according to Gurney.

Aside from aesthetics and IAQ, The Rush also cut retrofit costs by choosing fabric duct. Michael Hamil, vice president, Cherokee Millwright, Maryville, Tenn., a combination commercial mechanical contractor/industrial millwright firm, estimates The Rush saved considerable installation labor and handling costs versus metal duct because fabric duct is 90 percent lighter, hangs from suspension cables, and arrives at the job site via UPS delivery. "In an exposed ceiling situation where someone wants to make a design statement, fabric duct appears to be a good alternative to metal duct," said Hamil,

who's expecting to use fabric duct a second time in an upcoming project that includes a radio broadcast studio. Material costs of using fabric duct were comparable to using single-walled spiral metal duct and less expensive than double-walled metal duct, according to manufacturer's representative, Scott Ryan, Greeley Associates, Knoxville, Tenn., who introduced the project's engineers to DuctSox.

Cherokee also installed 12 Trane Co., Tyler, Texas, Voyager Series rooftop units, which are controlled by individual Trane thermostats.

Gurney plans to use fabric duct exclusively in the one-year-old firm's expansion plan, which includes four locations this year and four to six locations next year in several undisclosed East Coast market locations.

Because of DuctSox's factory silk screening program, Gurney plans to cut HVAC costs in future locations by imprinting logos of vendors on fabric ducts and charging the advertising space on an annual fee basis. Unlike the immovability of metal duct, fabric duct's light weight and suspension system make it easily interchangeable or movable if vendors change or the health club's air dispersion requirements are altered due to floor plan reconfigurations.

The Rush's new locations will be a combination of new construction and former retail stores with great locations left abandoned by the current recession. The Rush, as apparent in its quick success as an anchor in a major regional mall like the Knoxville Center Mall, is getting calls from many shopping center leasers across the country with empty retail spaces to fill. ■

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