



WHEN IT COMES TO INTERIOR ENVIRONMENTS, FEW IN THE HOSPITALITY INDUSTRY CAN MATCH THE SENSITIVITY OF THE *LEOPOLD BROTHERS*. Creating what they call “the world’s first environmentally-sustainable brewery” meant paying extraordinary attention to every detail, from the ducts in the ceilings to the barley in the beer.

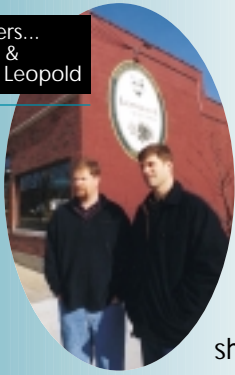
**DRAFT BEER, DRAFT-FREE AIR ENHANCES NATURAL BREWPUB**

case study

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## FABRIC OVERFLOWS METAL IN BREWERY.

Owners...  
Scott &  
Todd Leopold



The result is *Leopold Brothers* of Ann Arbor, a refreshingly bright, open pub which reflects the trendy, socially conscious sensibilities of Ann Arbor, Michigan residents. At the same time it showcases the earth-friendly concerns of the brothers, Scott and Todd Leopold. Scott, an environmental engineer, gained his green credentials while working at the world's largest wastewater engineering firm, while Todd brewed for several small breweries in Germany.

softer, less industrial appearance. "They also seem to provide better air distribution because they force air through the entire length of the duct rather than just at specific points as with traditional metal duct," stated Leopold.

### FIRST DUCTS A DUD

Unfortunately, the fabric ducts originally installed in the building attracted plenty of attention because of their noisy, drafty operation. Air was dispersed through holes perforated intermittently into the side of the ductwork, creating streams of air through the room. "In some parts of the room you didn't get much circulation at all, while in other spots it was pretty gusty," Leopold recalled.

Fortunately, a local HVAC contractor suggested a more effective alternative in Comfort-Flow DuctSox, a fabric duct with a more effective means of air distribution. The Comfort-Flow product allows air to flow through the permeable woven fabric of the duct itself, as well as through a narrow continuous vent sewn along the duct's entire length. The result is an evenly disbursed flow, without the localized drafts of large holes or vents.

### COMFORT-FLOW: CLEAN COMFORT

The result has been a more pleasing atmosphere for brewery's patrons, plus an unexpected dividend. "I've had people comment that the smoke from cigarettes and cigars doesn't bother them as much here," Leopold said. "The circulation of air is even and smooth, so smoke just dissipates... it isn't blown into the face of the nonsmoker next to you by the ventilation system."

Overall, Leopold believes the DuctSox lend a welcome note of hominess to the brewery's retro warehouse atmosphere. "A space with open rafters and cement floors can seem a little cold. Both the appearance and the efficiency of the DuctSox help to warm the place up, and make it more appealing to our visitors." ■



Application features 2 Comfort Flow DuctSox units 28" in diameter x 55' reducing to 18" x 11'. Each DuctSox diffuses 6800 CFM at .5 ESP through porous fabric and linear mesh vents 3/8" wide.

### PLANTS IN A BEER GARDEN

Visitors to Leopold Bros. are immediately struck by the brewery's lovingly recycled building. The second floor was removed from the interior of the 1920s-vintage former auto parts store, to reveal large monitor windows in the roof and a ceiling of rough hewn wooden beams. The resulting interior is open, bright and spacious. Interior decor is kept minimal to put maximum focus on the beer, many varieties of which are both brewed and served on the premises. The most unique Leopold Bros feature is the adjacent greenhouse, which uses spent water and waste material from the brewing process to grow hydroponic plants. The organic greenery gives the atmosphere a fresh, airy feel, lending a note of natural harmony to the clean and simple interior.

Harmonious appearance and energy efficiency was the impetus which led co-owner Scott Leopold to choose fabric ducts over traditional metal for the brewery's heating system. "We think the fabric ducts draw less attention to themselves and just felt they'd look better than having a great big sheet metal duct hanging from the ceiling," said Leopold. He noted that ducts made of flexible fabric gave the room a