ABOUT THE PROJECT

The new Walnut Creek Library opened on July 17, 2010. Designed by Group 4 Architects to achieve LEED Certification, this new facility has many amenities that the young and old can utilize for several years to come. Eventually earning LEED Gold Certification from the USGBC, the library contains a large meeting room, conference room and a new technology center that can be used by anyone. The children’s area is designed to foster reading in an open and inviting environment that has views of the garden while the young adult area is designed for the technologically advanced teens of today.

The library also incorporates a wide variety of Green Building design elements, including daylight harvesting, an advanced mechanical system and utilizing recycled materials. The placement of 80% of parking spaces under the building and plaza areas reduces the heat island effect of paving and preserves space in the Civic Park as well.

THE TITUS SOLUTION

An equally important and vital piece to the green design was to have an energy-efficient HVAC system in place that offered sustainable features.
as well. The Walnut Creek Library selected the Titus UnderFloor Air Distribution (UFAD) system as well as the FlowBar to achieve this goal.

The main underfloor product featured in the library was the TAF-R diffuser. The TAF-R is a GreenSpec Listed product that is available in standard light gray or black. All components are constructed of a high-impact polymer material that is designed to resist damage from foot traffic found in libraries. Additional colors may be specified to match any building’s interior scheme. This model can help contribute toward achieving LEED EA Credit 1: Optimize Energy Performance; IEQ Credit 6.2: Controllability of Systems; Thermal Comfort, IEQ Credit 7.1: Thermal Comfort - Design, and if the building utilizes an existing structure, MR Credit 1.1: Building Reuse.

Another high performing and energy saving product that can be found in the library is the Titus FlowBar. The FlowBar is an architectural linear diffuser that maximizes engineering performance without sacrificing aesthetic considerations of the design architect. FlowBar’s outstanding performance allows higher airflows than conventional linear diffusers. The wide array of slot widths allow for more CFM per linear foot while minimizing noise and pressure loss.

Conventional linear diffusers are supported by the duct system and in most cases are installed after the ceiling system is in place. For complete ceiling integration, the FlowBar system is offered with a large selection of flange styles compatible with various ceiling applications. Our unique clip/hanger support system allows for quick and easy installations. The
FlowBar system actually supports and becomes an integral part of the ceiling system and is installed along with the ceiling suspension system.

The Titus FlowBar offers a new concept of air distribution that fully integrates with all ceiling systems. The FlowBar system is available in continuous linear, incremental linear and square configurations. This entire series of diffusers is available with two unique pattern controllers as well.

THE END RESULT

The Walnut Creek Library is a shining example of what can happen when the community and the designer are fully engaged with the design of a new facility. This collaboration allowed the Group 4 Architects to create an aesthetically pleasing building that will service this community for many generations to come.