

## Mixed-Use Application of LP® FlameBlock® Fire-Rated OSB Sheathing

Grimm + Parker Architects



### Mixed-use residential and retail application of LP® FlameBlock® Fire-Rated OSB Sheathing

#### SUMMARY

Grimm + Parker Architects, based in Calverton, Maryland, is one of the region's leaders in community-based architecture. Since 1972, the company has applied the idea that communities are not merely a place to live but a place to thrive in with countless facilities, including community centers, performing arts centers, libraries, educational facilities and more. The company's 75 employees design sustainable projects, placing value on integrity, compassion, purpose and dedication.

The Varsity at College Park is a 400,000-square-foot multi-use building near the entrance of the University of Maryland, just off campus. When complete, it will offer dormitory housing for 900 students and more than 16,000 square feet of retail and restaurant space, as well as parking for 200 cars. The five-story complex is expected to be completed in June 2011.

#### OBJECTIVES

Grimm + Parker's focus on community architecture set high standards for The Varsity at College Park. The dormitories are attractive to upperclassmen and located off campus. They also relieve stress on the University of Maryland's dormitories.

Conforming to the College Park US 1 Sector Plan, which is designed to convert US 1 into an attractive gateway corridor to the University of Maryland, the Varsity transforms Route 1, which runs through the University of Maryland, into a more vibrant and pedestrian-friendly streetscape. It also supports the conservation of resources and contributes to the restoration of nearby Paint Branch Creek and the overall improvement of its watershed.

The project is designed to be an example of public and private cooperation near campus while meeting students' expectations for housing that supports a rich living and learning environment coupled with a variety of retail amenities.

#### In Brief

##### LOCATION

College Park, Maryland

##### PROJECT SUMMARY

In building The Varsity at College Park, a complex of student dormitories, retail establishments and parking, Grimm + Parker Architects sought to speed construction and exceed required building codes in order to provide a safe place for students to live and shop.

##### WEBSITE

[www.gparch.com](http://www.gparch.com) and  
[http://oxblue.com/pro/open/  
clarkconstruction/varsitycollegepark](http://oxblue.com/pro/open/clarkconstruction/varsitycollegepark)

##### PROJECT OBJECTIVES

- Save time and money on construction and materials
- Maintain structural performance
- Meet or exceed building codes related to fire resistance

##### SOLUTION

Two-sided LP® FlameBlock® Fire-Rated OSB Sheathing was used to achieve a two-hour exterior fire wall. This approach was cost effective when compared to the time and labor needed to apply two layers of gypsum sheathing. The LP FlameBlock core also provided the structural performance and ease of use sought after by Grimm + Parker.

*"Whenever we need a two-hour wall,  
we'll use this product."*

Vinay Ganeshan, Project Manager  
Grimm + Parker Architects



## IMPLEMENTATION

With a commitment to sustainability in a community environment, and an understanding of the needs of durability and safety, Grimm + Parker Project Manager Vinay Ganeshan considered LP® FlameBlock® Fire-Rated OSB Sheathing.

Ganeshan said the sheathing allowed for more efficient construction. “We were able to use one layer of OSB instead of two layers of gypsum,” he said.

Fernando Bonilla, senior associate with Grimm + Parker Architects, said the contractor was on board as well and that the product worked very well from a construction standpoint.

Bonilla pointed out that the stick-frame over concrete podium construction required special considerations. The International Building Code allows for a height of up to five stories of wood construction for a residential building with two-hour rated exterior walls. Typically, this wall uses two layers of exterior gypsum sheathing on the outer surface of the wall, according to Bonilla.

However, the two-sided LP FlameBlock Sheathing substitutes for the two layers of gypsum with one layer of OSB coated on both sides with the fire-resistant coating.

Not only did this save the expense on purchasing gypsum board, but the contractor was able to use the same crews already working on site since the same tools and techniques are used to work with LP FlameBlock Sheathing as with standard OSB Sheathing.

## OUTCOME

As in any dormitory project, durability is a key issue. Ganeshan said using LP FlameBlock Sheathing made the exterior walls durable, while also providing a two-hour fire rating.

“The structural engineer played an important role in this,” Ganeshan said. “It was a very intricate sheer design, and when they learned about the product they knew LP FlameBlock Sheathing was the right choice.” He added that there have been no structural or sheer panel issues crop up during construction.

Progress on the project can be viewed at <http://oxblue.com/pro/open/clarkconstruction/varsitycollegepark>.



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