

# Portland State University and Miller Paint: Working with Local Suppliers to Meet Materials Transparency Goals

## EXECUTIVE SUMMARY

The BlueGreen Alliance's Foundation (BGAF) Building Clean program is an initiative to strengthen domestic manufacturing by accelerating energy-efficient retrofits for affordable multi-family housing. As part of this initiative, BGAF has completed a product database with information on American manufacturing sites that produce healthier energy and water-efficient products.

The **Buy Local, Buy Healthy** database, accessible through [www.buildingclean.org](http://www.buildingclean.org), provides material supply chain information for manufacturers, residents, building owners, and contractors wanting to learn about energy efficient housing products and hazardous materials.

Portland State University (PSU) is a sustainable purchasing and design leader, with Technical Design Standards (TDS) that emphasize both **buy local** and **buy healthy** concepts. In any new construction and renovation project, PSU must achieve gold standard certification under LEED v4, a certification that requires a deeper understanding of the health impacts of materials.

### VISION:

"Portland State University leads the way to an equitable and sustainable future through academic excellence, urban engagement, and expanding opportunity for all."

When Portland State began their renovation of the Peter Stott Center in 2012, they needed low-VOC paint, free of "Red Listed" chemicals. In order to meet the LEED requirements, PSU turned to their preferred local paint supplier Miller Paint.

**This coordination between the university and their local supplier demonstrates that buying local and buying healthy is both possible and profitable for the customer and the manufacturer.**

BGAF spoke with Portland State University's Sustainability team and representatives from Miller Paint to complete this case study.

# PORTLAND STATE UNIVERSITY—TECHNICAL DESIGN STANDARDS AND BACKGROUND

Portland State University worked in conjunction with the city of Portland to develop their 2016-2020 strategic plan—“Let Knowledge Serve the City.”<sup>1</sup> In forming this plan, PSU shared climate action goals, collaborating to integrate sustainability into their policies, planning, education, and operations.

This effort is exemplified in PSU’s Technical Design Standards (TDS)<sup>2</sup>, which outlines PSU’s commitment to build and maintain a campus with a preference for sustainable products that are **“durable, non-toxic, (and) manufactured and sourced locally.”**<sup>3</sup>

## PSU TECHNICAL DESIGN STANDARDS HIGHLIGHTS

### C. Sustainable Design

#### 3. Sustainable Products/Material Handling/Sustainable Design

- To every extent possible, materials and adhesives to avoid the “Red List of Chemicals and Materials” as designated by the International Living Building institute.
- Locally and regionally sourced finishes and materials within 500 miles are encouraged.
- Select paints, coatings, sealant, adhesives, composite wood, carpet and agrifiber products that have low or zero VOC content.

This commitment is propelled by the requirement that all new construction and renovation projects achieve LEED Gold certification. Additionally, PSU’s TDS encourages using materials with Environmental Product Declarations and “low embodied emissions” when possible.

**These requirements result in procurement policy that benefits the local economy, the environment and the overall health of the students, and faculty.**

## UNDERSTANDING LEED V4 GOLD CERTIFICATION

Leadership in Energy and Environmental Design (LEED) is a green building certification administered by the US Green Building Council and is found in over 165 countries, comprising a total of 15 billion square feet of LEED projects.

Participating projects demonstrate how green their building is by earning points on a scorecard for a variety of implementations that improve sustainability and health. The four levels from highest to lowest are Platinum, Gold, Silver, and Certified.

LEED v4—launched in 2013—offers builders, developers, and project managers a performance-based approach and a “rigorous focus on material selection, human comfort, air quality and human health features of a building.”<sup>4</sup>

The materials and resources section of LEED v4 awards points for using products with published Health Product Declarations (HPDs) and Environmental Product Declarations (EPDs). This prompts dialogue with manufacturers and emphasizes life-cycle environmental impact transparency.

1 PSU 2016-202 Strategic Plan, <https://www.pdx.edu/president/sites/www.pdx.edu.president/files/StrategicPlan2016-4.pdf>

2 PSU Technical Design Standards, <https://www.pdx.edu/construction/sites/g/files/znldhr2146/files/2021-01/Technical-Design-Standards-Rev4C.pdf>

3 PSU Technical Design Standards Revision 4C, pg. 13, <https://www.pdx.edu/construction/sites/g/files/znldhr2146/files/2021-01/Technical-Design-Standards-Rev4C.pdf>

4 Green Building Council (USGBC), “LEED v4.1”. Found online: <https://www.usgbc.org/leed/v41#bdc>

## The Issue

When PSU began planning for the renovation of the Peter Stott Center, members of the Campus Sustainability Office were prepared to abide by both LEED v4 Gold requirements and their own Technical Design Standards. Specifically, they needed to source low to zero VOC paints and paints free of any “Red Listed” Chemicals—a list, published by the International Living Future Institute (ILFI), representing chemicals, materials, and elements that pose the greatest risk to human health in the building products industry.<sup>5</sup>

To earn maximum credits for LEED v4, PSU also needed paint with a published HPD.

With these priorities in mind, the PSU team turned to their valued local supplier Miller Paint, who had a low-VOC paint line called Acro Pure. PSU is a long-time customer of Miller Paint and used Acro Pure in several past PSU building projects.

Miller Paint had not yet undergone the process of acquiring Health Product Declarations (HPD) for their low-VOC paint line. Instead of turning to another supplier, Portland State University’s new policy incentivized Miller Paint to disclose HPDs for their whole Acro Pure Paint line, fulfilling PSU’s health transparency goals while expanding the market for Miller Paint.

This process expanded their market share and demonstrated that collaboration with local suppliers can benefit the manufacturer, customer, and consumer.

## Miller Paint and the HPD Process

Miller Paint worked with PSU and Elixir Environmental, a company that assists manufacturers through the HPD, EPD, or Life-Cycle Assessment (LCA) process. An HPD consists of a list of material content and potential health hazards associated with the product’s ingredients.<sup>6</sup> When PSU first approached Miller Paint with the idea to collaborate and engage in the HPD process, there was concern regarding the price and the procedures. Going through an HPD is not an inexpensive process, and Miller had to be strategic with their limited budget as a smaller company.

The HPD requires that chemicals be disclosed to at least 1000 parts per million (ppm). Miller Paint and Elixir Environmental completed the HPD process over 12 weeks, resulting in third-party verified ingredient transparency for all Acro Pure paints, including the primer.

According to a 2018 report by Mordor Intelligence, the market for low-VOC paints was \$6.7 billion in 2017, with a projected growth rate of 6.45% from 2021-2026.

BGAF spoke with Sam Hampson from Miller Paint about the experience of working through the HPD process with Portland State University on the LEED v4 certification. Although they do not have the capital to run all their paint lines through HPDs, he emphasized that their work to eliminate Red Listed Chemicals and publish HPDs in Acro Pure made it easier for them to be considered for other projects and was a necessary move to compete with other paint suppliers in Portland. “Publishing Health Product Declarations have given us and more importantly our clients’ confidence in the use of a disclosed product.”<sup>7</sup>

5 International Living Future Institute (ILFI), “About the LBC Red List”. Found online: <https://living-future.org/declare/declare-about/red-list/>

6 Miller Paint, “Our History”, Found online: <https://www.millerpaint.com/our-history/>

7 Information provided by Samuel Hampson, Miller Paint, 2021

# CONCLUSION

The stringent technical design standards from Portland State University are the exception to the rule when it comes to healthier and local procurement. Many universities and local governments have sustainable procurement policies that contain preferences for regional/local and healthier products, but PSU remains one of the best examples of these preferences in action.

Their work with Miller Paint to produce paint lines that fit the LEED v4 requirements and their Technical Design Standards demonstrate that cooperation with local manufacturers is possible when purchasers are striving to budget for their values. **At any level of purchasing, it is possible to get the sustainable products that you want and support both the local economy and manufacturers by buying local and buying healthy.**

## Keys to Success

In producing this case study, the BlueGreen Alliance Foundation noted the following steps taken that led to a successful outcome for both Miller Paint and Portland State University:

- **Review local options before procuring materials from other sources.**

For Portland State University, the decision to work with Miller Paint over choosing another paint supplier came from the value of Miller Paint as their local partner. Guiding Miller Paint through

this process was more impactful and offered a real opportunity to fully meet their sustainability goals of buying local and buying healthy, while advancing “equity, sustainability, and community well-being.”

Because they worked with Miller Paint instead of turning to another supplier, they kept sustainability as a core value and met their TDS and Sustainable Procurement Policy goals.

- **Work with your local partner to help them understand the value in their partnership over other options.**

As stringent green building requirements become commonplace, smaller companies have a vested interest in ensuring they can compete in the healthier products market. For Miller Paint, the decision to complete the HPD process was impacted by financial considerations and ingredient disclosure concerns.<sup>8</sup>

As a smaller company, competing in the healthier paints space is much more difficult. Larger companies like Sherwin Williams are already going through these processes and have more capital to do so comfortably. Miller Paint made strategic decisions about their disclosures to ensure that their transparency process would not expose their formulation secrets.

Portland State University was able to leverage their position as a large purchaser and long-time partner to incentivize Miller Paint to publish HPDs, allowing both parties to evolve together in their valued local partnership.

8 LEED, <https://new.usgbc.org/leed>.

*The BlueGreen Alliance Foundation would like to thank Karsyn Kendrick for her work developing this case study.*

### FOR MORE INFORMATION:

[Portland State University Technical Design Standards](#)  
[Portland State University Sustainable Procurement Policy](#)  
[BlueGreen Alliance Foundation Building Clean Product Database](#)

If you have questions about this case study, please contact Linnea Morgan at [lmorgan@bluegreenalliance.org](mailto:lmorgan@bluegreenalliance.org).