

design for freedom grace farms



© Chuck Collier Schmidt

Design for Freedom Pilot Projects model more transparent and ethical supply chains in built works.

pilot project case study

Bigfork Library
Cushing Terrell, Martel,
ImagineIF Library Foundation
Bigfork, Montana
Opening date: August 2024
Construction Timeline: 12 months



Pilot Project Program and Bigfork Library

Design for Freedom by Grace Farms has been addressing the issue of forced labor in the building materials supply chain since 2020. The renovation of the Bigfork Library in Montana’s Flathead Valley was chosen as a Design for Freedom Pilot Project to show the industry that with dedication and stakeholder buy-in, responsible sourcing is possible on a modest budget. The project focused on interiors, which is a natural entry point to integrate Design for Freedom Principles into design and construction. Further, the committed project team, led by Cushing Terrell, prioritized ethical supply chains throughout the length of the project.

“The Bigfork Library exemplifies how equitable choices can create a significant difference, even with a small budget and in a rural community,” said Jessica Murray, Interior Designer, Cushing Terrell. Cushing Terrell is a near century old, 450-person architectural-engineering firm based in Billings, Montana that was responsible for the architecture, civil, electrical, mechanical, structural, landscape, lighting, and interior design on the Bigfork Library. Design for Freedom worked with the interior design team across its multiple U.S.-based offices to realize the project.

The project was a full renovation of an existing 6,000 sq. ft. church hall. Materials were sourced from the United States, South Korea, South Africa, Mexico, Ireland, China, Indonesia, and Bangladesh. Grace Farms worked with the project team to trace eight materials including carpet, laminate flooring, door hardware, gypsum wallboard, lighting, paint, solid surface countertops, and furniture.

The Cushing Terrell team brought together collaborators familiar with Design for Freedom Principles including Shaw, which introduced the first PVC-free fully recyclable Cradle-to-Cradle carpet tile to the industry in 1999.

The project brought together firms that have been active participants in Design for Freedom. ASSA ABLOY supplied door hardware and Sherwin Williams supplied paint. Both are partners in the *With Every Fiber* exhibit at Grace Farms.

Here is a snapshot of the Pilot Project’s outcomes including how a “closed spec” system enabled the vetting of building materials, as well as presented an opportunity to test new mapping and tracing materials technology. The challenges faced in this project, such as how legal departments can hinder supply chain transparency are also an outcome worth noting as illuminating industry-wide barriers is the start of confronting the issues.

“Products are made on the backs of the lives of human beings. So how do we address this issue in the work that we do with our customers?”

Tim Conway, VP Sustainability, Shaw Industries,
Design for Freedom Summit 2024



Pilot Project Outcomes:

Commitment to Ethical Sourcing

Even prior to the construction of the Library, Cushing Terrell's team contacted over 200 suppliers with Design for Freedom tools to integrate ethical sourcing strategies. Their 450-person practice prioritized ethical and sustainable supply chains throughout the project. Through the research on the Bigfork Library, the team developed an in-depth body of knowledge on the eight suppliers highlighted in this case study. Collecting this important information can help guide suppliers in their day-to-day sourcing or future Design for Freedom Pilot Projects.

Prioritizing Circularity

Actualizing the Design for Freedom Principle to "Prioritize Circularity", the Bigfork Library project utilizes the structure of an existing 6,000 square foot church hall, preserving a significant foundation for the full interior and exterior renovation of the building. Adaptive reuse projects conserve resources, remove excess from the waste stream and truncate supply chains by avoiding virgin materials at high-risk of forced and child labor as they are at the extractive end of the supply chain. Research materials such as the flooring and solid surface countertops, utilized circular practices with the substantial use of recycled content and Third Life Reclamation Programs that provides opportunities for reuse at the end of life for the product.

Unlocking the Problem with ASSA ABLOY

ASSA ABLOY has taken a proactive stance in the activation of their entire supply chain of more than 9,000 suppliers to find and address forced labor. Their commitment to building an ethical and transparent supply chain resulted in the first-ever Pilot Project and case study to trace the 150 components of the Mortise Lock used in the Bigfork Library. ASSA ABLOY's steadfast commitment to Design for Freedom Principles initialized further investigation through supply chain risk assessment and compliance technology.

Streamlining Supply Chains at Shaw

The Bigfork Library is one of the first buildings to install the PVC-free Resilient Floor by Shaw, which recently came to market. PVC is a widely-used plastic in construction that is associated with environmental and health risks. As the industry looks toward better solutions, Bigfork Library is an exciting demonstration of the use of PVC-free materials. By utilizing the same suppliers who created the first PVC-free fully recyclable Cradle-to-Cradle carpet tile to the industry, Shaw is driving the industry



Pilot Project Outcomes:

The Impact of Closed Specs

The Cushing Terrell interiors team applied a “closed spec” process for sourcing and examining ethical materials selection for this Pilot Project. By using closed spec sourcing, the team could ensure the installation of ethical materials. While closed specifications are more common in interior applications, this approach to material selection can become an effective tool to scale the impact of ethical sourcing to structural building material sourcing such as concrete or steel. Once teams identify known responsible suppliers, they can apply this methodology to uphold human rights within the built environment.

Social Equity Creates Value

The Bigfork Library project illustrates that ethical sourcing is achievable and equitable on any budget - a feat that industry needs to hear to create lasting change in the marketplace. The Bigfork Library is the second library in the country to become a Design for Freedom Pilot Project. Distinguishing aspects of this project aside from a smaller budget and the focus on interiors is its location - a town nestled in Montana's Rocky Mountains. Regardless of location and budget, and perhaps the notion that budget-conscious ethical material sources would not be readily available, the Bigfork Library demonstrates that ethical and sustainable design is possible.

Fundraising Benefits

The Bigfork Library is a central gathering space and education hub in this 5,000-person rural town, a tight-knit community that came together to create a reflective and learning space for its residents. The Design for Freedom Pilot Project partnership brought auxiliary value to the ImaginELF Library Foundation's donors, positively impacting the Library's capital campaign.

Challenges in the Gypsum Industry

When looking into the source of gypsum for this Pilot Project, discussions of responsible tracing were halted by legal departments at several gypsum companies. Since the early days of material tracking with LEED, the gypsum manufacturers have been hesitant to share transparency data, a posture that has continued when approached about ethical sourcing. This experience highlighted concerns from companies regarding transparency in their supply chains and potential intellectual property disclosures. As the industry brings these challenges to light with our Design for Freedom partners, together we can bring about transparency and lasting change.



High-touch interior elements were a focus for the researched materials

Materials Examined

Grace Farms worked with Cushing Terrell to trace eight materials including carpet, laminate flooring, door hardware, gypsum wallboard, lighting, paint, solid surface countertops, and furniture. Materials were sourced from the USA, South Korea, South Africa, Mexico, Ireland, China, Indonesia, and Bangladesh.

Building Program

Cushing Terrell collaborated with ImagineIF Library Foundation to realize the building from the beginning of design in March 2023 to completion in August 2024. The Bigfork Library project involved a full interior and exterior renovation of an existing 6,000 sq. ft. church hall and offers a place of exploration for people of all ages. Modern forms and materials serve as a backdrop for discovery both inside and outside the building with a variety of environments to explore.

The exterior design is minimal and modern and includes a wood-slat rain screen on the front and back faces of the building. The concrete entrance and exit forms act as “buttresses” to the interior bridge element. The rear of the building features landscaping that utilizes the existing grade to provide outdoor seating for small events.



Designers can drive change in the industry by educating themselves and asking the right questions

Getting Started

Prior to engaging in a Pilot Project, the team at Cushing Terrell contacted more than 200 suppliers to educate them about the Design for Freedom movement. Utilizing the [Supplier Questionnaire](#) and [Outreach Letter](#) from the [Design for Freedom Toolkit](#), the team set to work educating themselves about the role of forced labor in our building materials supply chain through practical application.

Research & Development Funding

Equipped with first-hand experience of the *Design for Freedom Toolkit*, the design team applied for a Cushing Terrell R&D Project, an internal research grant to participate in an official Design for Freedom Pilot Project with the Bigfork Library. The program encourages research, exploration, and discovery, building opportunities and incorporating the Pilot Project into the design process as an investment in research and continued growth as a leader in the industry.

Design professionals can drive real change to eliminate forced and child labor in the construction industry by consistently educating themselves and asking manufacturers the right questions.

Fundraising for Capital Campaign

As a Design for Freedom Pilot Project, Bigfork Library demonstrated its commitment to ethical sourcing, a story that positively influenced their fundraising efforts. The Library will continue to raise awareness of Design for Freedom's mission for years to come through permanent signage and ongoing educational opportunities.

The Cushing Terrell team actualized the Design for Freedom Principle "Find and Address Forced Labor" early on by being one of the first firms to bring the Design for Freedom Tools into practice.

The Bigfork Library, located in a closely-connected rural community, exemplifies Design for Freedom's commitment to uplift communities and create equitable outcomes around the world. Through rigor and hard work, the Cushing Terrell team brought together a robust body of knowledge, proving that ethical sourcing is achievable and equitable on any budget – a feat the industry needs to hear to create lasting change in the marketplace.



Learnings from the Bigfork Library were featured at the 2024 Design for Freedom Summit

The Cushing Terrell team followed the below steps to complete the Pilot Project:

1. Identified a project with an aligned mission for a potential Design for Freedom Pilot Project.
2. Submitted a proposal to Cushing Terrell's R&D program to support time dedicated to Design for Freedom Pilot Project efforts.
3. Identified materials for responsible sourcing that meet project's greater sustainability and performance goals.
4. Investigated multiple manufacturer options for each product type.
5. Requested supply chain information by utilizing the Design for Freedom Outreach Letter and Supplier Questionnaire.
6. Opened a discussion about Design for Freedom with manufacturers and requested information.
7. Collected responses with the Design for Freedom Tracking Schedule.
8. Reviewed documentation with the Design for Freedom team.
9. Followed up with manufacturers for additional information or clarification on submitted documentation.
10. Utilized a closed spec for identified products to meet transparency requirements.



@ChuckCollier-Schmidt

The carpet tiles were researched for responsible sourcing

Streamlining Transparency with Known Suppliers: **Carpet Tile & Resilient Flooring**

During the research process, Shaw was already aware of Design for Freedom Principles, which fostered an easier dialogue for tracking of carpet tile. Nearly 90% of their products are Cradle-to-Cradle Certified, underscoring their commitment to change across product lines. The researched product received a C2C Silver rating which certifies labor at the Tier 1 level. In addition, the product uses 58% pre-consumer recycled content, actualizing the Design for Freedom Principle to "Prioritize Circularity".

In 1999, Shaw introduced the first PVC-free fully recyclable C2C carpet tile in the industry. Shaw did not stop innovating with carpet tile and has recently introduced a PVC-free resilient flooring product. The resilient flooring market has traditionally been PVC products, which has been a challenge for consumers motivated by ethical and sustainable design principles. The resilient flooring uses the same product ingredients as the carpet tile, providing customers with healthier and responsible options in the market. With this knowledge, the design team was able to recommend Shaw's resilient flooring product. Knowing your suppliers and maintaining simple supply chains is a smart approach to streamlining the transparency process.

Unlocking the Problem: **Door Hardware**

ASSA ABLOY's proactive investment in a supply chain mapping technology to provide further visibility measures include: an outreach letter to suppliers, investment in a supply chain mapping technology to provide further visibility, GreenCircle Certified products with ethical supply chain attributes, auditing documentation, and various environmental labels like HPDs, EPDs, and Declare Labels. Their alignment with Design for Freedom's Principles further underscores their commitment to responsible practices.

The ASSA ABLOY Mortise Lock specified on this project has become a test case for the company, as it is complex and has over 150 components. ASSA ABLOY is working with new technology platforms to map and trace the supply chain as a direct result of their involvement with the Pilot Project. With over 9,000 suppliers across their supply chain, ASSA ABLOY is taking actionable steps with their leadership towards change.

ASSA ABLOY's door hardware is often categorized as an open specification in a typical project delivery model; however, the company transitioned to a closed specification to meet performance standards of the Bigfork Library. The practice of employing closed specifications for identified products that meet aesthetic, and subsequently sustainability or human rights standards, is a useful method to guarantee that the supply chain due diligence applied to select products is not overlooked in the bidding process.



@ Chuck Collier Schmidt

The Library will continue to raise awareness of Design for Freedom's mission for years to come through permanent signage and ongoing educational opportunities

Facing Industrywide Challenges:

Gypsum Wallboard

The design team faced challenges in connecting with representatives at several gypsum companies they reached out to – and discussions of responsible tracing were halted by legal departments. This experience highlighted concerns from companies regarding transparency in their supply chains and potential intellectual property disclosures. Since the early days of material tracking with LEED, the gypsum manufacturers have been hesitant to share transparency data, a posture that has continued when approached about ethical sourcing.

Gypsum wallboard is significant because of its ubiquitous presence in built projects; yet, it is not typically specified by architects/designers. Gypsum wallboard contains many high-risk ingredients as noted in the *Design for Freedom Report*. With 450 gypsum plants worldwide and 63 in the USA, understanding and addressing these concerns in the supply chain becomes crucial. The Design for Freedom team will investigate the gypsum industry in upcoming Pilot Projects, focusing on healthy materials and innovative leaders in gypsum ceiling products and other uses to help move the industry to adopt material transparency practices.

Social Equity is a Market Differentiator:

Ocean Plastic Lighting Fixture

The design team was originally interested in the sustainable sourcing story that this decorative pendant light fixture would tell because it was made entirely of ocean-bound and nearshore plastic. When approaching the manufacturer to learn more about their supply chains, the lighting manufacturer was highly responsive and provided comprehensive documentation for each ingredient in their product.

The Pilot Project research illuminated how innovative sustainability efforts and transparent supply chain practices can provide a double benefit as market differentiators. Locally made products satisfy consumer demand in a global, post-pandemic design climate, emphasizing that social equity matters to communities.



@ Chuck Collier Schmidt

Paint throughout the building was examined for responsible supply chain transparency

Expanding Partnerships:

Paint

Sherwin Williams has been involved with Design for Freedom since 2023, as an active partner in the *With Every Fiber* exhibit dedicated to Design for Freedom at Grace Farms. Engagement from multiple representatives across the country has led to further commitment to advancing the movement.

Sherwin Williams provided detailed documentation for the Pilot Project. Their local representatives efficiently connected the design team with the transparency expert, facilitating smooth communication.

Key learnings included discovering manufacturers that are making significant strides toward forced labor-free policies. These companies view minimizing forced labor as not just a response to consumer demand, but also as the best way to operate.

Sherwin Williams stands out for having transparent and accessible Corporate & Supplier Codes of Conduct, third-party monitoring of their supply

chain, knowledgeable and accessible company representatives, and completion of the Design for Freedom questionnaire. These aspects reflect their commitment to ethical practices and transparency in their operations.

Circular Products Create an Impact:

Solid Surface Countertop

During the Pilot Project process, the solid surface manufacturer willingly responded to the Design for Freedom Supplier Questionnaire, showing openness to feedback and improvement, and making the company a positive candidate for incremental change toward improved labor transparency practices. Manufacturers with reputable sustainability practices in place, including materials sourced within a 500-mile radius, an HPD, a Declare Label, and a Third Life Reclamation Program providing circular opportunity for reuse at the end of life for the product.



@ Chuck Collier Schmidt

Furniture that was examined met the project's budget and ethical sourcing goals

Meeting Ethical Sourcing on a Budget: Furniture

A key learning illuminated through the materials examination of the SitOnIt Seating product lines, was that an ethical supply chain does not always result in higher consumer prices, challenging a common assumption. The design team was pleased to find an equitable solution that met the human rights, performance, and budget goals for the project.

During the design team's outreach process with SitOnIt Seating, it took some time to escalate requests to the best team member to provide visibility into the company's supply chains. One key learning was that a healthy supply chain does not always result in higher consumer prices, challenging a common assumption.

SitOnIt Seating, an office furniture manufacturer, has several positive practices in place, including requiring all direct suppliers to sign a Code of Conduct that prohibits forced labor, posting anti-slavery policies on their website, conducting social compliance audits of 88% of their direct spend suppliers, and maintaining membership in Customs-Trade Partnership Against Terrorism with compliance in forced labor requirements through their parent company. These efforts demonstrate their commitment to ethical sourcing and labor practices.

Making The Commitment

ASSA ABLOY

"We manage supply chain risks and challenges by communicating our policies and principles on business ethics, human rights, and labor standards, health and safety, and the environment, to our suppliers. This consistent approach helps to raise suppliers up to our standards. It has also given us the opportunity to share information about the Design for Freedom guidelines and how we align with this movement. Product and process optimization play a large role in our Design for Freedom involvement and we plan to continue driving it as part of our larger sustainability initiative. Success, fulfillment, and joy come from working with customers on innovative projects like the Big Fork Library. A holistic spirit of continuous improvement fuels us all to work together and pursue greatness through progress in the built environment and its value chain."

-Amy Musanti, Director of Sustainable Building Solutions, ASSA ABLOY

Shaw Industries

"Products are made on the backs of the lives of human beings. So how do we address this issue in the work that we do with our customers? At Shaw we have done this through the Cradle-to-Cradle design principles, and we've had the C2C social responsibility attribute, which has been our North Star. Now we have the Design for Freedom movement to educate and accelerate this change.

As manufacturers and design professionals, the only thing that we own in our material selections is choices, right? So, in these Design for Freedom projects, we're talking about some heavy things. Do you have forced labor in your supply chain? Is this made using safe ingredients? Just put Design for Freedom [Principles] into product development and building material selection to make positive impact in our material



Members of the Cushing Terrell, Imagine IF Library Foundation, ASSA Abloy and Grace Farms team came together to celebrate the project opening in September 2024

choices. It's hard work but is work worth doing and I am glad that Shaw made the commitment to lead and change our industry, and we haven't given up."

-Tim Conway, VP Sustainability, Shaw Industries
Design for Freedom Summit 2024

Making The Commitment

Cushing Terrell

"The opening of the Bigfork Library marks a significant milestone in our community, brought to fruition through the collaborative efforts of the ImagineIF Library Foundation. This partnership has been instrumental in realizing a space that not only serves as a repository of knowledge but also as a hub for community engagement and learning. With a focus on fostering education, creativity, and connection, the Bigfork Library stands as a testament to the power of collaboration and community spirit.

The Bigfork Library exemplifies how equitable choices can create a significant difference, even with a small budget and in a rural community. All communities deserve access to education and can benefit from the Pilot Project outcomes. The Pilot Project was of keen interest to the Library donors and effectively supported the capital campaign's fundraising efforts."

-Jessica Murray, Interior Designer, Cushing Terrell

ImagineIF

"Being a part of the Design for Freedom Pilot Project goes hand in hand with what we are creating with ImagineIF Library Foundation Bigfork – a place to explore the world through story and connection and challenge our ideas of what is possible. This project will open the eyes of our community to new processes, thoughtful design, and human dignity."

-Sara Busse, Executive Director of ImagineIF Library Foundation



Pilot Project announcement at the 2024 Design for Freedom Summit



@ Chuck Collier Schmidt

The Bigfork Library will continue to raise awareness of Design for Freedom for years to come through permanent signage and ongoing educational opportunities

Project Data

Pilot Project Team

Cushing Terrell, Martel, ImaginELF Library Foundation

Materials Examined

Carpet, Door Hardware, Furniture, Gypsum Wallboard, Laminate Flooring, Lighting, Paint, Solid Surface Countertops

Materials Sources

USA, South Korea, South Africa, Mexico, Ireland, China, Indonesia, Bangladesh

Certification and Transparency

Cradle to Cradle, FSC, SA8000, Declare, JUST, C-TPAT, Certified Sustainability Facts (CSF) from GreenCircle Certified

Suppliers provided the following documentation

STRT, EPD, HPD, 3rd Life Reclamation Program, Social Compliance Audits, Codes of Conduct Policies, Codes of Ethics

Salvaged, Upcycled, and Re-used Circular Materials

Ocean-bound and Nearshore Plastic, Recycled Glass, Existing Structure



© Cristian Salazar

Grace Farms brings together people across sectors at the SANAA-designed River building and Barns, situated on 80 acres of publicly accessible, preserved natural landscapes

Design for Freedom Pilot Projects

Design for Freedom by Grace Farms reimagines architecture by raising awareness and inspiring responses to disrupt forced labor in the building materials supply chain. Grace Farms developed the Design for Freedom Pilot Project Program to model more transparent and ethical supply chains. These projects engage project teams, yield new research and partnerships, and uncover challenges and opportunities of how to build more humanely. This process challenges each team to examine their supply chain for fair labor and galvanize change to create new outcomes for the industry.

Learn More about Design for Freedom

Read the [***Design for Freedom Report***](#) to understand the scope of the problem and challenges facing the eradication of forced and child labor from the built environment. For material specific information, explore the [***Design for Freedom Toolkit***](#) to learn more about the 12 high-risk materials within the built environment and utilize tools to start tracing materials.

About Grace Farms Foundation

Grace Farms is a cultural and humanitarian center in New Canaan, Connecticut. Grace Farms brings together people across sectors to explore nature, arts, justice, community, and faith at the SANAA-designed River building and Barns, on 80 acres of publicly accessible natural landscapes. Grace Farms' humanitarian work to end modern slavery and foster more grace and peace in local and global communities includes leading the Design for Freedom movement to eliminate forced labor in the building materials supply chain.

For more information visit gracefarms.org