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

pilot project case study

Temporal Shift
Temporary Art Installation
Alyson Shotz
New Canaan, CT
September 2021 - October 2022



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Temporal Shift, a site-responsive mirror polish stainless steel sculpture pictured with artist, Alyson Shotz

Temporal Shift, an art installation with limited materials, launched the Pilot Project pathway.

Pilot Project Program

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.

Temporal Shift

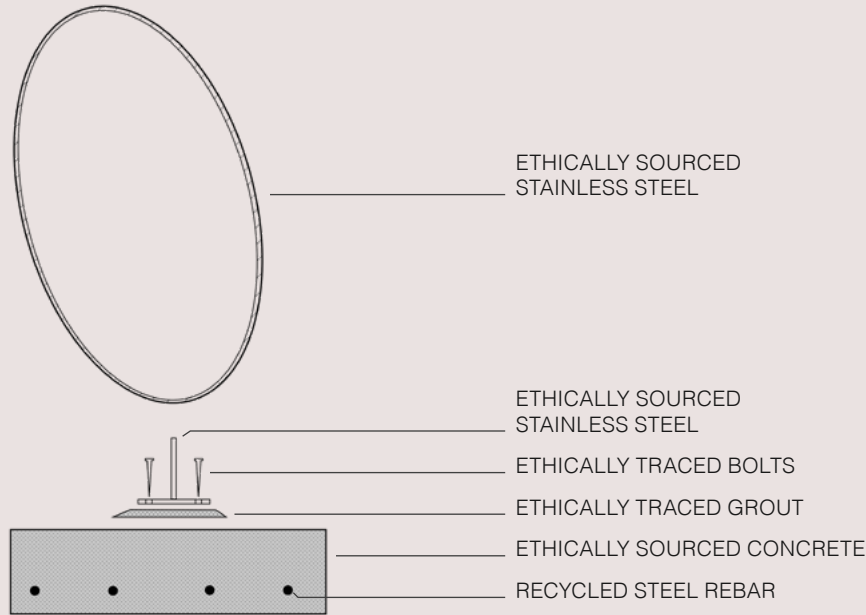
Grace Farms Foundation commissioned acclaimed artist Alyson Shotz to create *Temporal Shift*, a site-responsive mirror polish stainless steel sculpture. A temporary installation, *Temporal Shift* was sited in an interior courtyard of the River building from September 2021- September 2022.

Temporal Shift presented the opportunity to align the process of bringing this new pathway to the public with the ever-expanding framework of analysis, inquiry, and collaboration demonstrated by Design for Freedom. Grace Farms served in an owner role and prioritized the projects' commitment to ethical sourcing as the first Design for Freedom Pilot Project.

Grace Farms utilized a methodology to explore a limited number of four materials used in the sculpture. To join this inquiry-based approach,

Grace Farms collaborated with Design for Freedom Working Group members Joe Mizzi, President/COO of Sciam Construction and Jay Gorman, Assistant VP at Sciam Construction. Together, this team was able to pursue further questions, relationships, and insights into the development of new practices for material examination. Mizzi and Gorman had previously conducted a forensic study of the materials that comprise Grace Farms' roof featured in the [Design for Freedom Report](#).

Mizzi and Gorman worked directly with manufacturer North American Stainless (NAS) and supplier O&G Industries (O&G) to ascertain the source of materials used in the sculpture, including steel, concrete, grout, rebar, and bolts. As a buyer, Grace Farms was the first to inquire of NAS whether or not the specific metal we were procuring was made with fair labor end to end. The process of applying an ethical framework to the sourcing of materials for the sculpture and its installation made clear that ethical sourcing is possible. All of the stainless steel and concrete used in *Temporal Shift* were ethically sourced and free of forced labor.



Courtesy of Sciamé

Sciamé's analysis led to ethical sourcing and tracing of the materials used in *Temporal Shift*

The Materials Examined

- Mirror polish stainless steel, 14' (h) x 8.8' (w) x 1.5" (d)
- Concrete footing
- Rebar in footing
- Grout used around footing
- Bolts to fasten base to footing

Concrete

The team examined the tracing of concrete used in the sculpture's footing. The concrete was sourced locally in Connecticut and southern New England. For O&G, one of the northeast's leading providers of construction services and products, including concrete, this type of query was "eye opening" for the company. Notably, O&G was also the provider of concrete for the construction of Grace Farms.

As a vertically integrated firm, O&G's practices were enlightening, as was their willingness to partner and expand the conversation with their industry colleagues.

O&G and many vertically integrated firms have corporate oversight of labor; however, when demand exceeds supply, companies will import from outside vendors. In the case of concrete

suppliers, concrete is made of components such as sodium and calcium carbonate, which are found in countries around the world where the mining of these materials is often unregulated and workers are in hazardous conditions.

Steel

Tracing steel to the extraction level presented different challenges to the material tracking process. Since so much of the metal used in rebar is recycled and comes from different locations around the world, this component was much more difficult to trace beyond Tier 2. In the analysis, nearly 10% of the material make up remains untraceable. There is a value in prioritizing recycled content in materials from both an environmental and ethical perspective. Steel is one of the most widely used construction materials and infinitely recyclable, expanding the life cycle of material that already exists in the built environment.

As a primary and preferred structural building material, steel combines tensile strength with low cost, but can also come with a high human cost. There are many points of potential forced labor along the steel supply chain due to the hazardous conditions and lack of transparency ranging from extraction and smelting to production, rolling, and erecting.



NAS provided Metallurgical Test Reports required to verify the strength and durability of the stainless steel. Within these documents, the project team was able to authenticate the origins of the raw material.

Design for Freedom leaders are initializing institutional responses to embrace material circularity and recyclability to eliminate material flow from the extraction level, where forced labor is the most prevalent with the double benefit of increasing environmental sustainability and truncating the supply chain.

Examining materials and asking questions from the beginning of a project is key to the effort to move toward more ethical supply chains. The response from NAS and O&G was encouraging.

Tracing materials in this project was the beginning of replicating this type of material examination on a much larger scale with other Grace Farms' Pilot Projects, which include local and global partners.

Galvanizing Change

Temporal Shift Program

"I would like my sculpture to be constantly changing, like the weather. When an object has an easily understandable structure or surface, one can know it too quickly...Light, time of day and angle of view all contribute to the change the sculptures can encompass."

- Alyson Shotz

Shotz participated in several public programs at Grace Farms, where she discussed *Temporal Shift* and talked to participants about Design for Freedom and her commitment to sourcing materials that were free of forced and child labor.



Design for Freedom Pilot Partner Joseph Mizzi from Sciame Construction leading a discussion at the First Annual Design for Freedom Summit

Pilot Project Outcomes

Temporal Shift was an integral part of the first Design for Freedom Summit held on March 31, 2022, serving as a tangible example of ethical material transparency and driving awareness to the issue while it was on site.

NAS continued their commitment to Design for Freedom by providing the stainless steel for a permanent installation at Grace Farms demonstrating ethical design principles in action. The Design for Freedom Exhibit, *With Every Fiber* challenges the industry and public-at-large to consider where the materials that go into buildings come from and reimagines the future of the built environment.

As the first completed Pilot Project, the sculpture is a hopeful symbol of awareness and action of the Design for Freedom movement.



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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 center for collaboration and culture in New Canaan, Connecticut. Grace Farms bring 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