



Subject: Sustainability

Desana remains committed to high performance brick systems keeping the goals and values of sustainability at the forefront. The components of our systems are comprised of only three materials: stainless steel trays, aluminum subframing, and brick. All of these materials have been widely used in construction for decades and have proven their long term performance for the life of the structure. All have published Environmental Product Declarations showing the origins and cradle to gate processes.

As a supplier of façade systems our goals consist of the following:

1. Provide maximum thermal efficiencies with up to 10 inches of continuous insulation.
2. Provide the most effective defense against deterioration from water entry. All systems come with a dedicated water management system that controls and directs incidental water/moisture out of the wall system.
3. Using only products that are environmentally friendly, recycled, and recyclable with a useful end of life program.
4. Eliminate as many CO2 emissions as possible from our wall systems.

The DURUS LC system is comprised of only three materials: stainless steel trays, aluminum subframing, and brick. All are long term, safe, recycled, and have a decades long track record of performance. Nothing wears out. Nothing deteriorates. Nothing rusts or needs to be replaced. Primary in the design is the defense against water infiltration. The deterioration of wall assemblies typically signifies the presence of water, which will deteriorate material and thermal performance. Our systems are engineered with a design life of 65 years.

DURUS Brick systems from Desana use 90% less mortar than traditional full bed brick. With the DURUS LC System the mortar is completely eliminated effectively bringing CO2 emissions to zero.

The elimination of mortar will have significant implications for the construction sector. While difficult to measure with specificity, reduction or elimination of mortar in brick veneers will see improved environmental performance, a reduction in the carbon footprint, and a mitigation, however measured, of climate change. (Corporate Energy 2023)

BRICK

Brick isn't just a material, it's a choice. A choice for sustainability, as its natural clay composition and longevity reduce environmental impact. A choice for durability, standing strong against the elements and time itself. A choice for versatility, offering endless design possibilities from classic to contemporary. Brick

embodies timeless value and is a wise investment that appreciates in beauty and character with each passing year, including 90% Recycled Content, 50% reduction of embodied carbon, and 15% reduction in water use. Brick has been manufactured with clay and shale for decades if not longer. It carries a permanent place in the landscape of natural building materials. See Technical Notes from the Brick Industry Association #48 for breakdown of sustainability compliance.

ALUMINUM

Aluminum is lightweight and strong, durable, and infinitely recyclable. It is energy-saving and is the sustainable material of choice. As we strive for a more energy-efficient future, aluminum continues to provide innovative solutions and competitive advantages for businesses and consumers. (The Aluminum Association) Aluminum brackets and rails comprise the subframing or subgirt systems which create the rainscreen design for the façade system. Utilizing Grade 6060 with virgin and recycled aluminum, all components are recyclable at their end of life.

STEEL

Structural steel is 93% recycled and 100% recyclable, making it a material that is circular for generations. Instead of going to the landfill or an incinerator, decommissioned bridges and buildings go right back into the supply chain to become steel again and again.

The American steel industry is the least carbon-intensive of all major steel-producing countries. The structural steel industry is serious about decarbonization--and its footprint will continue to decrease as the U.S. power grid becomes less dependent on fossil fuels. (American Institute of Steel Construction)

Naturally Circular – All materials used in the assembly of the Desana facades contain recycled materials and are recyclable at their end of life. The full systems are demountable, salvageable, and can be reused for similar or other purposes.

Transportation reduction. Brick assemblies from Desana use 75 less clay and shale and 90% less mortar thereby reducing the costs and the environmental impact of transportation with fewer trucks, less fuel consumption, less carbon output, and less wear and tear on US highways.