



Designing For Sustainability

Architectural Firms Revolutionize Self-Storage Spaces

BY ROBIN MURPHY





Self-storage facilities are sometimes known for their utilitarian design, often lacking in aesthetic appeal and sustainability features. However, as the demand for eco-friendly solutions increases, architects are turning to sustainable design practices for self-storage facilities, especially multistory and urban projects. In this column, we will not only explore the pros and cons of sustainable self-storage design but also identify effective ways to help design firms achieve this green status.

Pros Of Sustainable Design For Self-Storage Facilities:

- **Energy Efficiency** – Sustainable self-storage facilities can significantly reduce energy consumption and operating costs. Implementing energy-efficient lighting, heating, and cooling systems and insulation can result in a reduction in energy usage and greenhouse gas emissions. Improving occupant relationships to natural lighting also helps in both energy savings and a sense of well-being.
- **Improved Air Quality** – Sustainable self-storage facilities can also improve air quality leveraging low-VOC materials, proper ventilation systems, and the incorporation of green spaces.
- **Positive Branding** – Sustainable design can enhance the brand image of self-storage facilities. This can be a significant competitive advantage, especially in urban areas where sustainable living is becoming increasingly important. This is particularly true for Gen Z and millennial customers.
- **Cost Savings** – While a sustainable design may require additional upfront costs, owners and developers can expect to benefit from long-term cost savings in energy and maintenance expenses.

Cons Of Sustainable Design For Self-Storage Facilities:

- **Higher Upfront Costs** – Incorporating sustainable design elements can add nominal costs to the construction and design process, requiring additional capital investments. This can be a barrier to entry for smaller owners and developers.
- **Longer Construction Timelines** – Sustainable design may require more extensive design, planning, and construction, which can result in longer timelines and delays.
- **Limited Options** – While sustainable materials and systems are becoming more readily available, the options for self-storage facilities may still be limited compared



Recommendations

- **Conduct a feasibility study.** Clients should assess the costs and benefits of sustainable design practices for their specific site and budget.
- **Plan for LEED Certification.** The Leadership in Energy and Environmental Design (LEED) certification is an industry standard for sustainable design. Planning for LEED certification can help ensure the facility meets sustainable design requirements. The LEED accreditation process can be expensive and time consuming. There are other sustainable programs to consider, including Green Globes, Built 4 Star, and Green Communities.
- **Partner with a knowledgeable architect.** Clients should partner with an architect experienced in sustainable design to ensure the facility meets the highest standards of sustainability while remaining cost-effective. This generally translates to pursuing credits that make sense for this specialized use.

The decision to design and build a sustainable self-storage facility is frequently predetermined by the authority having jurisdiction (AHJ). It is not uncommon for AHJs to embed a sustainability requirement into their zoning code in order to make specific uses more desirable to the community. A sustainability requirement also helps align future development to a community's desire to move in a sustainable direction. It is important to be prepared if this becomes a requirement for your next deal.

In conclusion, while the sustainable design for self-storage facilities has both pros and cons, incorporating these design elements can be beneficial for both the project and client's business reputation in the long run. By preparing for sustainable design through feasibility studies, planning for LEED certification, and partnering with knowledgeable architects, clients can create environmentally responsible facilities that offer cost savings and a competitive advantage in the marketplace.

Robin Murphy is the owner and senior principal architect of Jackson | Main Architecture, P.S., an architectural firm with extensive experience in designing self-storage facilities across diverse settings such as rural, suburban, and dense-urban areas. With over 24 years of experience in the self-storage industry and licensure in 19 states and provinces, Murphy is a highly skilled and knowledgeable architect. He is also a LEED-accredited professional, signifying his expertise in sustainable design practices, and is a member of the American Institute