

France

HQE (Haute Qualité Environmentale – High Environmental Quality)

HQE is a French rating tool for identifying and implementing practical and measurable green building design, construction, operations and maintenance solutions.

Buildings and communities are evaluated throughout the building lifecycle on essential topics: eco construction, eco management, comfort and healthiness. A private initiative, HQE has been recognized as a public utility since 2004.

HQE lists 14 targets divided into 2 areas and 4 families. The building owner selects the most relevant target to focus on, and must be "very powerful" in 3 of the 14 targets, and "powerful" in 4 of the 14 targets.

VICTAULIC COMMITMENT TO SUSTAINABILITY

- Environmental responsibility and roots in sustainability for 85 years.
- Victaulic products are made with natural and recycled resources using lean, responsible manufacturing processes that follow the life of a building.
- During installation, Victaulic products significantly reduce or eliminate waste, emissions and noise, while maximizing energy efficiency.
- Victaulic has been involved with the Alberici Headquarters, Overland, Missouri (LEED® 2.0 Platinum certification); Vancouver Olympics Village (LEED® Gold certification); Janssen Pharmaceutical (Johnson & Johnson), Titusville, New Jersey (LEED® Platinum certification); SAS Institute, Toronto, Canada; and BG Chemie in Germany.
- Victaulic assures the "green spirit" of a building by ensuring sustainable piping design and system performance.
- Easy access to systems installed with Victaulic products promote routine maintenance schedules and thus enable building systems to operate at peak efficiency for the life of a system.
- Victaulic may facilitate reaching HQE certification; solid environmental commitment with certified engineers on staff.

Target 2: Choice of the Construction Process & Product Use

Requirement – Encourage the responsible choice of construction products, process and long life-cycle products in order to reduce the environmental footprint.



VICTAULIC SOLUTION:

- Victaulic uses 90 percent recycled steel and ductile iron for its coupling and fittings, meaning 1,039 tons of steel are recycled at its facility in the United States each week.
- Victaulic products are known for their robustness and long life-cycle, designed for the life of a system. There are more than 77 commercialized couplings in use since 1925.
- Victaulic utilizes "Bag-and-Tag" process to manage waste and job site activity. Shipping to the contractor reduces waste by eliminating over-order and product stockpiles.

Target 3: Reduce Harmful Effects on Building Site

Requirement – Enhance the building site management in order to reduce construction waste as much as possible, and also the harmful effects like noise and emission of Particulate Matter (PM).

VICTAULIC SOLUTION:

- Victaulic uses a no-flame-joining method that reduces emissions of Particulate Matter (PM). In 2007, Victaulic couplings used on world projects eliminated 145 metric tons of particulate matter, the equivalent of removing one million cars from the road for a week.
- Installation of Victaulic products on prepared pipe does not require any incremental electrical energy, therefore optimizing energy performance and reducing noise on the job site.
- Victaulic utilizes "Bag-and-Tag" process to manage waste and job site activity. Shipping to the contractor reduces waste by eliminating over-order and product stockpiles.
- Victaulic joined pipe can be pre-fabricated and configured to lay flat in a truck bed, unlike prefabricated welded spools that are non-adjustable in the field. This means 2/3 more material can fit per truckload, equating to reduced transportation costs.

Target 4: Energy Management

Requirement – Maximize the energy level performance to reduce environmental and economic impacts associated with excessive energy use.

VICTAULIC SOLUTION:

- Victaulic experience in green building projects can help improve energy performance by our product efficiency and installation management techniques.
- Installation of Victaulic products on prepared pipe does not require any incremental electrical energy, therefore optimizing energy performance.



- Victaulic products promote the use of proper, comprehensive HVAC maintenance programs. Thus, efficient and maintained systems may use 15 to 20 percent less energy than systems allowed to deteriorate without regular maintenance, and could reduce total operating costs by as much as 50 percent.
- The Victaulic versatile grooved piping system is effective on a variety of piping systems, including the promotion of lighter wall pipe on a variety of applications. Lighter wall pipe can provide five to 10 percent more cross-sectional flows than welded pipe. Pipe couplings and fittings are designed to minimize friction, improve throughput and thus reduce power requirements at the pump.

Target 7: Maintenance

Requirement – Optimize maintenance needed and its environmental effect by facilitating its access and operations.

VICTAULIC SOLUTION:

- Victaulic joint design provides quick and easy access to piping systems thus allowing for continued use during routine maintenance, pipeline repair, or system expansion.
- Victaulic durable C-shaped cross-section seals can handle significant compressive cyclical loading. The
 Victaulic gasket can withstand repeated pressure and depressurization for many years without fatiguing the
 rubber.
- Access to the Victaulic grooved piping system is simple. Two coupling bolts are loosened allowing easy
 disassembly and removal of system parts for service or replacement, without the need to shut down the
 entire system. Vicatulic allows quick and easy access for routine equipment maintenance, system expansion
 or pipeline repair, thus promoting proper maintenance programs for increased system energy efficiency.

Target 8: Hygrothermal Comfort (Heat and Cooling Comfort)

Requirement – Provide a comfortable thermal environment that promotes productivity and well being.

VICTAULIC SOLUTION:

- Victaulic provides a balancing valve system that enhances the overall project ventilation and air distribution flow.
- The Victaulic no-flame joining method promotes proper maintenance systems that can preserve indoor air quality during renovation or scheduled maintenance.



Target 9: Acoustic Comfort

Requirement – Reduce the likelihood of noise from new development affecting nearby noise-sensitive buildings.

VICTAULIC SOLUTION:

- Victaulic mechanical joining systems do not contribute to background noise, and provide significantly higher productivity and reduced sound during installation.
- Victaulic flexible couplings provide vibration attenuation in the following ways: pipe end separations, elastomer gaskets and ductile iron housings.
- Victaulic mechanical grooved pipe systems deliver unsurpassed vibration isolation and sound attenuation characteristics throughout the life of a system.

Target 13: Air Quality

Requirement – Reduce indoor air quality problems resulting from construction or renovation, and promote the comfort and well being of construction workers and building occupants.

VICTAULIC SOLUTION:

- Unlike welding that emits highly toxic pollutants, uses vast amounts of electrical energy and specialty gases,
 Victaulic flameless connections avoid impact on human safety and the environment.
- Health hazards such as skin burns and eye damage caused by exposure to ultraviolet radiation, carbon
 monoxide poisoning, emphysema and other pulmonary illnesses resulting from toxic fume inhalation are
 avoided.
- The Victaulic no-flame joining method promotes proper maintenance systems that can preserve indoor air quality during renovation or scheduled maintenance.

Conclusion

Victaulic saves time and money and enhances sustainability, not only by the manufacture of the products themselves, but through the Victaulic installation and maintenance processes. As discussed above, Victaulic may be involved in as many as seven HQE targets. Using Victaulic products in your pipe system may ensure excellent opportunities for HQE certification. Consult your local Victaulic representative for the right solution on your next sustainable building project.

