



United Kingdom/International

BREEAM (Building Research Establishment Environmental Assessment Method)

An internationally recognized certification system that measures how well a building or community performs across 10 metrics; management, health and well being, energy, transport, water, materials, waste, pollution, innovation, land use and ecology.

BREEAM credits are awarded according to building design, construction, operations, and maintenance solutions. It operates throughout the building lifecycle - design and construction, operations and maintenance, tenant fit-out and significant retrofit.

Credits are added together to produce a single overall score on a scale of Pass, Good, Very Good, Excellent, and Outstanding.

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 certified), SAS Institute, Toronto, Canada, and BG Chemie in Germany.
- Victaulic assures the “green spirit” of a building by enabling sustainable piping design and system performance.
- Easy access of systems installed with Victaulic products allow for proper maintenance schedules and thus building systems to operate at peak efficiency.
- Victaulic may facilitate reaching BREEAM points; solid environmental commitment and experience, with experienced sustainable-certified engineers on staff.

Construction Site Impacts

Requirement – Recognize and encourage construction sites managed in an environmentally sound manner regarding resource use, energy consumption and pollution.



VICTAULIC SOLUTION:

- Victaulic offers value engineering to ensure the installation is made with a minimum of products and in the most efficient way.
- Victaulic uses a no-flame-joining method that reduces emissions of Particulate Matter (PM). In 2007, Victaulic couplings used on world projects instead of welding eliminated 145 metric tons of particulate matter, the equivalent of removing one millions cars from the road for a week.
- Victaulic can minimize job site waste through lean manufacturing (produce and ship only required materials), as well as coordinate deliveries according to the contractor strategy and schedule.
- Installation of Victaulic products on prepared pipe does not require any incremental electrical energy, therefore optimizing energy performance.
- Victaulic utilizes “Bag-and-Tag” process to manage waste and job site activity. Shipping to the contractor only required materials as needed reduces waste by eliminating over-order and product stockpiles on job sites.

Indoor Air Quality

Requirement – Reduce the risk to health associated with poor indoor air quality.

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.

Volatile Organic Compounds

Requirement – Recognize and encourage a healthy internal environment through the specification of internal finishes and fittings with low emissions of volatile organic compounds.

VICTAULIC SOLUTION:

- Victaulic uses a no-flame-joining method that reduces emissions of Particulate Matter (PM). In 2007, Victaulic couplings used on world projects instead of welding eliminated 145 metric tons of particulate matter, the equivalent of removing one millions cars from the road for a week.
- More than 75 percent of Victaulic fittings and couplings are dip coated, a process that produces less wasted paint, does not pose hazardous air pollutant (HAP) risks nor contains as many volatile organic compounds (VOCs) as paints for spray processes.



Thermal Comfort/Zoning

Requirement – Ensure the use of tools that achieve appropriate thermal comfort levels. Encourage the provision of user controls, which allow for independent adjustment of heating/cooling systems within the building.

VICTAULIC SOLUTION:

- Victaulic provides a balancing valve system that enhances overall project ventilation and air distribution flow.
- Balancing valves maintain a dynamic flow that enables the HVAC system to provide correct energy output throughout a typical 24-hour period.

Reduction of CO2 Emissions

Requirement – Recognize and encourage buildings that are designed to minimize CO2 emissions associated with their operational energy consumption.

VICTAULIC SOLUTION:

- Victaulic uses a no-flame-joining method that reduces emissions of Particulate Matter (PM). In 2007, Victaulic couplings used on world projects instead of welding eliminated 145 metric tons of particulate matter, the equivalent of removing one million cars from the road for a week.
- Victaulic products and the subsequent accessibility of piping systems encourage implementation of proper, comprehensive HVAC maintenance programs. This may result in the use of 15 percent to 20 percent less energy than systems allowed to deteriorate without regular maintenance and could reduce total system operating costs by as much as 50 percent.
- 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.
- Victaulic can fit more material per load, equating to reduced transportation costs and carbon emissions.
- Victaulic eliminates rework, and the waste associated with rework, such as the need to over order or stockpile product replacements that drive up raw material and transportation waste.
- Victaulic reduces the “days” required on the jobsite, resulting in less crane days and forklifts, as well as less people traveling to and from the jobsite via car or bus



Responsible Sourcing Materials

Requirement – Encourage the specification of responsibly sourced materials.

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 per week.
- Victaulic conducts manufacturing with a recycling process that includes 100 percent of sand used in its casting process.

Construction Site Waste Management

Requirement – Promote resource efficiency via the effective and appropriate management of construction site waste.

VICTAULIC SOLUTION:

- Victaulic has utilized a sustainable management policy for 85 years, by recycling sand and using recycled content in its manufacturing processes.
- Victaulic can minimize job site waste through lean manufacturing (produce and ship only required materials), as well as coordinate deliveries according to the contractor strategy and schedule.
- Victaulic is a clean system for installation with minimum waste during spooling (cleaning with water) the installation.

Recycled Content

Requirement – Increase demand for building product that incorporates recycled content materials, therefore reducing impact resulting from virgin material extraction and processing. The minimum percentage for recycled materials is 10 percent for one point, and 20 percent for two points.

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 per week.
- Victaulic recycles 100 percent of its foundry manufacturing sand.

Noise Attenuation

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 of piping systems installed with its products.
- 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.

Innovation

Requirement – Provide additional recognition for a procurement strategy, design feature, management process or technological development that innovates in the field of sustainability, above and beyond the level that is currently recognized and rewarded within standard BREEAM issues.

VICTAULIC SOLUTION:

- Victaulic has launched several hundred products such as QuickVic® rigid and flexible couplings, which are assembled onto pipe without disassembling bolts, nuts and housings. This installation ready, patented design reduces handling and speeds installation, thus saving precious construction time.
- For more than 85 years, Victaulic has met customer demands for innovative, superior green products, such as the environmentally friendly Victaulic Vortex fire suppression system, the only fire suppression system certified FM 5580.

Conclusion

Victaulic saves time and money and enhances sustainability, not only by the use of its products themselves, but through the promotion of proper installation and maintenance processes. By avoiding welding, and recycling both sand and raw materials needed for manufacturing, Victaulic shares BREEAM objectives. Victaulic products may be involved in as many as 42 BREEAM points. Consult your local Victaulic representative on the proper use of Victaulic products to maximize results on your next sustainable building project.